CONSUMER reports

CONSUMERS UNION PRODUCT RATINGS

portable radios

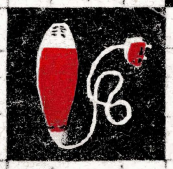
Automatic Washing Machines

autos: buick and desoto

toilet waters and colognes

TALCUM POWDERS

auto tires



Electric shavers

men's hats

HOW TO BUY

jewelry

50 "Best Buy" gifts

Christmas Cards

RECORDS FOR CHILDREN

the December issue

of Consumer Reports will be the annual Buying Guide issue (see back cover). No regular issue of the REPORTS appears next month. *All subscribers get the Buying Guide issue. All Christmas gift subscriptions start with it. Use the Gift Order Form on page 522.*

Letters

Field of interest

Dear CU: My personal opinion is that such subjects as the price of cortisone and ACTH are much too limited for your subscriber population. I'll agree to its narrow field of interest, but I'd like more on new Bach recordings—this centennial.

LOS ANGELES D.D.

It doesn't seem to CU that anything about drugs holding as much promise as cortisone and ACTH can be of limited interest to any group. There are several million Americans suffering from rheumatoid arthritis, and that is only one of many disease conditions for which cortisone and ACTH are either directly useful or potentially useful.

As for Bach, see page 518.

The general practitioner

Dear CU: As a rural general practitioner I would like to give an answer to the article by Caleb Smith, M.D. [reviewed] in the September CONSUMER REPORTS. I agree with the bad features of treating a symptom and not a disease, but I feel that Dr. Smith's figures on general practitioners are not true ones, and the fact that a doctor is a surgeon does not endow him with any special powers but enables him to make as many errors as the general practitioner but in a way not so open to reproach.

Exclusion of general practitioners from hospital staffs, as suggested by Dr. Smith, would be the worst thing that could be done and is the exact opposite to the correct approach to the problem for both the general practitioners and the specialists. . . .

The following two answers are the proper course. The American Academy of General Practice which requires 150 hours of postgraduate training every three years for continued membership. The other has just begun in a few hospitals and should be done in all hospitals. A record is kept of each doctor's work as to his admitting diagnosis, manner of handling his patient, consultation when needed, and final result of each case. In this way each doctor can tell if his work is deficient, passable, or above average, and also where his errors are apt to be. . . .

As to whether these procedures would do better under the present medical regime or under government control I cannot say, but my personal opinion, in the doctor's case, is that individual effort is more conclusive to betterment of oneself than any government organization could accomplish.

TROY, N.Y. S.E.P., M.D.

Dep't of utter evasion

Dear CU: I enclose, for your amusement . . . , a letter I received from the Parker Pen Company in answer to my complaint that while the price of a bottle of their Superchrome Ink has remained constant for approximately two years, its content has been reduced from four ounces (in a fancier package) to three ounces (in a standard package), thus marking at least a 33⅓% increase in its price.

Yours for intelligent consumption.

CAMBRIDGE, MASS. R.W.

[EXCERPT FROM LETTER FROM PARKER PEN CO.]

"Your comment regarding the size of the bottle relates to a problem which has received considerable attention in our operation. We did some research in different markets to decide the best sized bottle for Superchrome. We discovered most people prefer a three-ounce bottle of ink. This size fits conveniently in a suitcase when traveling and is the appropriate size for a desk. . . ."

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MEMBERSHIP: Subscribers can become members of Consumers Union either on written application, or by voting in the annual election of directors. Membership is terminated on written notice, or if exercise of the right to vote is not continued.

PURPOSES: Consumers Union's purposes, as stated in its charter, are to provide for consumers information and counsel on consumer goods and services . . . to give information and assistance on all matters relating to the expenditure of the family income . . . to initiate and to cooperate with individual and group efforts seeking to create and maintain decent living standards.

PRODUCT TESTS: Samples of products tested are bought on the open market by CU's shoppers. To cover brand changes, CU retests and publishes new ratings from time to time. So long as quality varies within brands and products change behind their names, no test results can provide an infallible guide. What CU's ratings offer is a continuing flow of comparative buying information the use of which, CU believes, will enormously increase the consumer's chances of getting his money's worth. Ratings are based on laboratory tests, controlled use tests, expert opinion or experience, or a combination of these factors. It is CU's pledge that any opinions entering into its ratings shall be as free from bias as it is possible to make them.

RATING SYMBOLS: A single block ■ identifies an Acceptable product; two blocks ■■ a Best Buy; a circle **O** a Not Acceptable product.

CONSUMER reports

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november 1950 volume 15 number 11

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CU's BEST BUY GIFT SELECTION: 53 suggestions from past ratings **475**

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ZENITH RADIO: The AM-FM Zenith table set reported on is, like its predecessors, "the best CU has tested in recent years" **501**

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SUBSCRIPTION RATES: $5 a year for the monthly CONSUMER REPORTS including 11 regular issues and the Annual Buying Guide number issued each December; $8.50 for two years. Add 50c for foreign subscriptions. Lower rates ($3.50 each) are available for group subscriptions; these rates apply only when five or more subscriptions are entered together.

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Many regular departments of the REPORTS, including Economics for Consumers, Health and Medicine, Gardening, and Movies, have been omitted from this special Christmas Buying Issue to make room for more reports on products. They will be resumed in the next issue.

BOARD OF DIRECTORS Colston E. Warne, *president;* Bernard J. Reis, *treasurer;* Osmond K. Fraenkel, *secretary;* Arthur Kallet, *director.* Harold Aaron, M.D., Alex Bavelas, Frank Beube, D.D.S., Helen Hall, Paul J. Kern, Sidney Margolius, Edward Reich, Theodor Rosebury, Madeline Ross, Adelaide Schulkind, Theodore Shedlovsky.

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Once Over

Electric shavers, 1950

This year's tests by CU of those ever-popular gift items, electric shavers, covered three widely sold brands. The *Schick* "20" was new and had not been tested before. The other two, the *Remington* Contour De Luxe AG and the *Sunbeam* Shavemaster W, were included because the *Remington* and *Sunbeam* models tested last year rated highest in those tests.

Three samples of each shaver were tried out by the "shaving squad," a jury of CU staff members who use electric shavers regularly. The shavers were also checked for electrical shock hazard; all were judged safe.

The jury found the performance of the *Remington* and the *Sunbeam* much the same as last year. The *Schick* "20," which has the same double head as the *Schick* Super 400 of a year ago, but has a new shape and is said to have an improved motor, also behaved about like earlier *Schicks*. The *Remington* and the *Sunbeam* gave the fastest and closest shaves, though not quite as close as shaves which can generally be obtained with a safety razor. On the other hand, they were only fair in regard to freedom from irritation, and while the *Remington* was fairly good for trimming mustache and sideburns, and easy to clean, the *Sunbeam* was poor in these respects. The *Schick*, which was found fair in speed and closeness of shave, produced the least irritation of the skin and was the most effective for trimming mustache and sideburns.

The members of the jury were by no means unanimous in their verdicts. While most rated the *Remington* and the *Sunbeam* high for closeness of shave, for example, each was rated poor in this respect by one jury member. No shaver was rated uniformly good or poor on any count. Your own beard or skin may be such that you are the one who finds a given shaver poor where most find it satisfactory.

The tests re-affirmed CU's previous advice: buy a shaver from a store that will exchange it or refund your money if you don't like it (or if the person to whom you give it doesn't like it) after a few days' use. The ratings should give you a likely order in which to try the different brands.

In addition to these three, CU reported in November 1949 on three other electric shavers, the *Norelco*, *Sears* Craftsman and *Schick* Colonel 300, and in September 1950, on another, the *Richard-Swiss*—all of which are currently available. The *Norelco* shavers are manufactured in Holland. The model 7737 (a-c only) at $15.50 is the least expensive shaver CU has tested recently. Model 7735 (a-c or d-c) costs $1 more. The CU jury found the *Norelco* rather slow, but light, quiet, and relatively easy to clean; it cut to average closeness. Also comparatively inexpensive are the *Sears* Craftsman (Cat. No. 9 E 9282, $16.50 plus shipping), available by mail from Sears-Roebuck, and the *Schick* Colonel 300 at $17.50. The *Sears* shaver was about average in performance, and the *Schick* somewhat below average.

The *Richard Swiss* ($22.30 prepaid, $24.75 at the end of a ten-day free-trial period, by mail from Richard Swiss, Inc., Long Branch, N. J.), is made in Switzerland and has two interchangeable heads, one for shaving, and one for trimming sideburns and long hairs. The CU jury reported that it gave a close shave and that the clipper head was good for trimming, but found that

RATINGS OF THREE ELECTRIC SHAVERS: In order of preference in jury tests for the characteristics listed (see story for other details). But note that some users could not get a close or fast shave with brands ranking highest in these respects, and some found no irritation with shavers ranked poorest in this respect. All could be used on a-c or d-c.

preference	closeness	speed	absence of irritation	trimming mustache & sideburns	ease of cleaning	price
1st	REMINGTON	SUNBEAM	SCHICK	SCHICK	REMINGTON	SCHICK $24.50
2nd	SUNBEAM	REMINGTON	REMINGTON	REMINGTON	SCHICK	SUNBEAM $24.50
3rd	SCHICK	SCHICK	SUNBEAM	SUNBEAM	SUNBEAM	REMINGTON $25.50

the regular shaving head got uncomfortably hot and that the necessity of changing heads for trimming was something of a nuisance.

All of the electric shavers tested by CU except the *Sunbeam, Norelco* and *Richard Swiss* had motors with contact points which pit or burn after a period of use, slowing down the motor and necessitating a trip to the repair shop for adjustment or replacement of the points. The *Sunbeam, Norelco* Model 7735 (a-c or d-c), and *Richard Swiss* had self-starting commutator-type motors. Instead of contact points these have brushes, which should last longer than contact points. The simplest type of motor was that in the *Norelco* a-c only model; this had neither brushes to wear out nor contact points to pit or burn.

Better ball pen

The ball-point pen probably is not destined to take the place of the fountain pen, but the new *Paper-Mate* (Frawley Corp., San Francisco, 97c; refill 49c) eliminates a few of the defects characteristic of most of the ball pens previously tested by CU (CONSUMER REPORTS, June 1949).

CU put 12 writing units—six pens and six additional refills—through laboratory and use tests. Tests of specimens of writing showed that the ink dried quickly and wouldn't smear ten seconds after writing (except on very glossy paper); neither did it transfer, or strike through to the back of the paper. Resistance of the ink to light-fading and to water was as good as that of the best of the ball pens previously tested. Special laboratory procedures to simulate the low atmospheric pressure of airplane flights and extreme temperature conditions, plus trials by a jury of staff members, indicated that the samples tested would not in normal use leak, blot, or stain fingers.

The jury felt that the *Paper-Mate*'s writing quality was fairly good and this view was borne out by examination of specimens of writing made with test pens in CU's writing machine. With the aid of the machine the writing capacity was found to be 30 hours —about average for ball pens. According to one ad, the *Paper-Mate* is the first ball-point pen "approved by banks." What this probably means is that it has been bought by several banks—but other banks have bought other makes of ball pens before, says the American Bankers Association.

Decals for cloth

There's a new product on the market enabling you to put designs on fabric without embroidering. It's a decalcomania called *Fabri-cal* (Meyercord Co., Chicago; 25c for a 5x7-inch sheet). *Fabri-cal* designs are ironed onto cloth, the whole transfer process taking only a few minutes. With them you can decorate blouses, T-shirts, children's clothes, etc., with flowers, animals (including horses and skunks), cowboys, and probably by now many other things. Fabric with the decal designs looks very much like printed fabric, but, at least at first, it feels slightly stiff. None of the colors ran or stained in washing.

CU's shoppers bought a number of *Fabri-cals* at the art needlework counters of department stores. The designs were tried on three types of material —a cotton percale, a cotton knit, and a rayon. The printed instructions for applying were easy to follow.

To put one of the designs on cloth, you first brush the back of the decal paper with a "dry-damp" cloth, then place the paper face down on the fabric, and iron over it for about 20

Paper-Mate ball pen: the ink dried fast and didn't smear except on very glossy paper

work in progress

Work on the following projects is now nearing completion; look for them in forthcoming issues of CONSUMER REPORTS.

- Auto batteries
- Oleomargarine
- Detergents
- Portable phonographs
- Shower curtains
- Plastic dishes

binder

CU's new library-type binder is designed to keep your issues of CONSUMER REPORTS together for you. It is made of black leatherette over stiff boards, with the publication name stamped in gold. A year's issues are held securely in place. The cost is $1.25 postpaid. Use the order form on page 473.

PICTURE CREDITS: The photographs in this issue were taken for CU by Michael Miller with the exception of those on pages 496-499, 508-511, 513-517, and — on pages 475-480 — the pictures of the carving set, the silver fork and spoon, the Versen lamp, the Komai chair, the autos, the watches, and the man's suit. All photos of autos were taken by Hamden Studio. The Komai chair was taken by Midori. The photo of the model with the artificial jewels is from Trifari. The man's suit picture is from the U. S. Bureau of Human Nutrition and Home Economics. The Santa Claus drawing is by Covarrubias; other front cover drawings are by Ray Komai.

quote

WITHOUT COMMENT

"The health needs of the American people are not being met and the American Medical Association is guilty of 'bad public relations' in trying to tell the people what they want rather than trying in a constructive way to help meet the needs, Prof. Harwood L. Childs, prominent political scientist, today told the nation's leading hospital administrators. . . . He suggested that the medical association instead of engaging in an 'unrealistic' fight that includes 'an expensive campaign against the health insurance program of the Administration in Washington,' should accept the wants of the American people as the basis for action and 'use their talents, funds, and initiative to bring about a realization of those desires.'"

NEW YORK TIMES

". . . I have mentioned a recurring aspect of advertising that sometimes gets out of control—the business of treating a new product as if it were the answer to a woman's every prayer. One thing after another is given such a build-up that when, in daily use, the products turn out to be nothing more than pretty darned good, the woman feels let-down."

Charlotte Montgomery in TIDE

"We salesmen—we advertising men!

"We're really a covey of cautions when we catch hold of something useless—and we make it sell like trusses in an anvil factory.

"Take us mattress boys, for instance.

"We sell 'em soft mattresses till they sink out of sight. Then along comes another one of us:

" 'It's a godawful shame the way folks are breaking their backs, pulling all the ligaments out of shape, getting back aches and often permanent stoops from sleeping on modern mattresses. Come up for air—climb out of that sinkhole—get out of that wallow, you sacroiliac stoop. Get a bed board at only one-half the cost of that new mattress you're lost in, and face a new life with bed and board in reclining ramrod luxury.'

"And we sell 'em, too. Don't we, kids?"

F. H. Newton in PRINTERS' INK

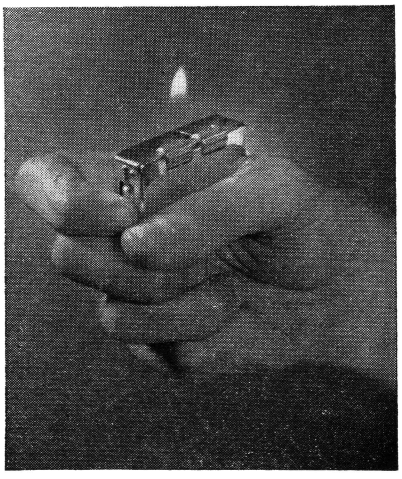
seconds, being careful not to let the decal or the cloth slip in the process. (The iron heat should be the normal one for the fabric you're using.) Then you remove the decal paper, put the fabric face down on clean paper, and iron again carefully for 30 seconds.

The instructions don't say anything about washing except that mild soap will give the best results. CU's technicians washed a number of *Fabri-cal*-decorated cloths—cotton percale in hot water, cotton knit in medium hot water, and rayon in water that was just warm, all with neutral soap.

After five washings some of the designs had faded. This was most noticeable on the knit cloth and least on the rayons, which had received the mildest washings. Exposure of decorated cloth to simulated sunlight in a Fadeometer for 26 hours also resulted in some fading. None of the fading was bad enough to make *Fabri-cals* Not Acceptable, but they would be most practical on things which don't require a lot of severe washing.

Butane-gas lighters

The butane-gas cigarette lighter, which is fueled with compressed gas instead of lighter fluid and eliminates the wick of the conventional lighter, seems destined to become the novelty gadget of 1951. At least four firms are already manufacturing them: the Parker Pen Co., which is making the *Flaminaire* models originally imported from France (CONSUMER REPORTS, March and October 1949); Ronson Art Metal Works (the *Vanguard* line of lighters with press-down striking mechanism); Brown & Bigelow (*Redi-Flame*); and Stratford Pen Co. (*Stratoflame*).



Stratoflame lighter: it lit almost every time, but singed the fingers of some testers

CU tested three samples of the Model H Supre-Macy *Stratoflame*, a special chromium-plated pocket model put out for R. H. Macy & Co. and other Macy Associates stores by Stratford Pen (NYC). The Model H Supre-Macy, which sells for $5.98, is mechanically similar, according to the manufacturer, to *Stratoflame* models sold generally for $7.50; other models range up to $200, depending on the type and design of the case. Refill gas cartridges cost 50¢ if the empty cartridge is returned, $3 without the cartridge.

Like other butane-gas lighters, the *Stratoflame* is supposed to give many more lights per refill than a conventional lighter. It is worked by pressing a button on one side to release gas; while the button is held down, the sparking wheel is spun with the thumb. The flame is extinguished by releasing the button and cutting off the gas.

A panel of CU staff members who used the *Stratoflame* reported that it was very reliable; it lit on the first try almost every time. Most panel members, however, found it uncomfortably heavy—at 2.9 ounces it's lighter than the pocket *Flaminaire* but heavier than most lighters tested by CU—and some found its operation awkward. The *Stratoflame* is meant to be operated with one hand, but several members of the panel had trouble learning to do this without singeing their fingers.

The *Stratoflame* was without a windscreen and the flame went out in the gentlest puffs of wind. Also, it was impossible to light a pipe with it. One of the samples had a defective valve-release mechanism and all of the gas leaked out of the cartridge. Another opened too easily; the cartridge fell out when the lighter was dropped.

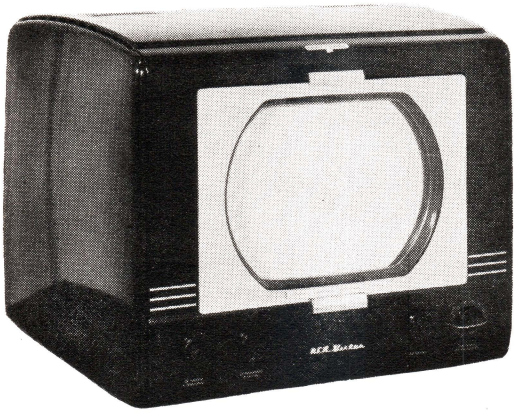
In laboratory tests with four gas cartridges, it was found that the *Stratoflame* would give about 1000 lights before needing a refill. This is less than the 2000 claimed in the ads and less than the 3000 the pocket *Flaminaire* gave in CU's tests, but it is at least five times as many as most pocket lighters give.

—on this and the next five pages

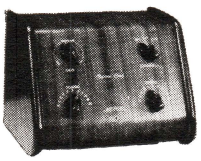
CU's best buy gift selection

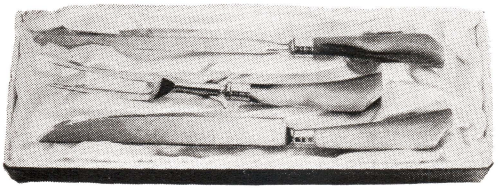
These Christmas gift possibilities have been selected from past test projects to make a checklist for Christmas shoppers. They are *not* offered as the Best Buys of the year, but rather as 53 items which rated high in CU's tests or in the opinions of expert consultants and which seem particularly suitable for Christmas buying. Articles at various price levels are included. The prices given are current and all items listed were available at the time of going to press.

- **A** utomobiles
- **B** lankets
- **C** arving sets
- **F** ountain pens
- **F** urniture
- **G** arden tractors
- **H** ome-wave kits
- **K** itchen mixers
- **K** nife sharpeners
- **M** en's suits
- **P** hotographic equipment
- **R** adios
- **R** ecord changers
- **S** ewing machines
- **S** heets
- **S** terling silverware
- **T** hermometers
- **T** oasters
- **TV** sets and boosters
- **W** ashing machines
- **W** atches



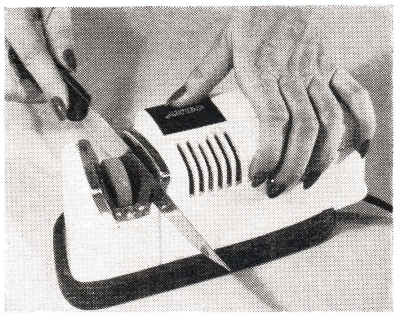
RCA sets uniformly have done well in CU's tests of TV sets (but see page 493 before buying). Among TV boosters, Astatic AT-1 ($29.70), right, was recommended for set owners in weak signal areas.



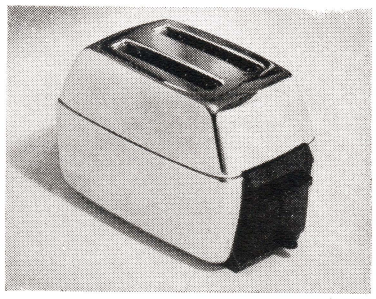


Boker No. 2268 carving set ($18) with "stainless" knife was the least costly of the top-rated sets.

The Sheaffer Stratowriter Retractable with gold-filled body ($15) was a good ball-point pen (for another, see page 473). Sheaffer fountain pens ($3.75 up) also rated Good.

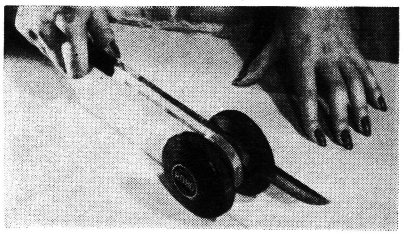


Corey DKS ($11.95), most expensive and only electric sharpener tested, was also most effective.



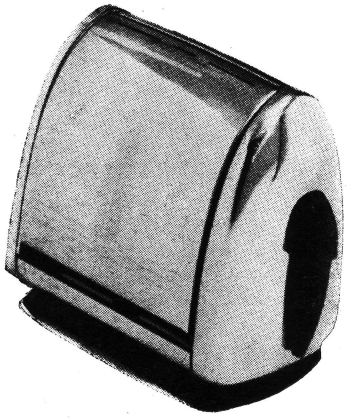
Camfield C-3 toaster ($23.95), one of the best automatic models tested, had wide adjustability and a set of controls at each end

Cheapest knife sharpener CU rated as Good was the hand-powered, rolling Robo ($1.89).

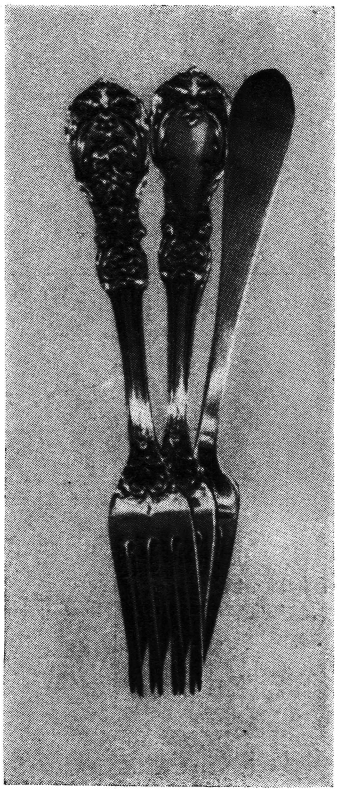


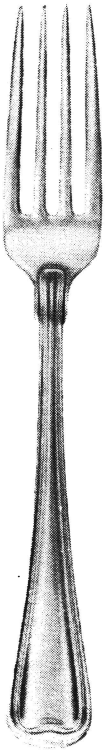
Best overall among table model radios under $30 which CU tested was Wards Airline, Cat. No. —1527M ($18.95). For a better table radio, see page 501.

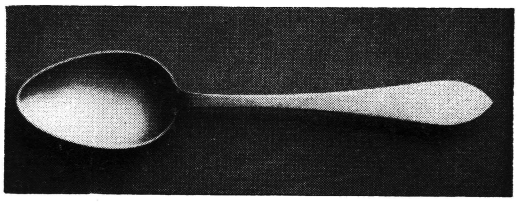
The non-automatic toaster CU found the best was Universal's EA-2105 ($7.95). It has one handle to operate both doors.



The Sunbeam Mixmaster 9 performed very well in CU's tests and was moderately priced for a mixer ($39.50). Although a new model is coming out, this one is still advertised and sold.

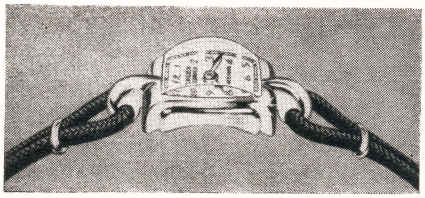


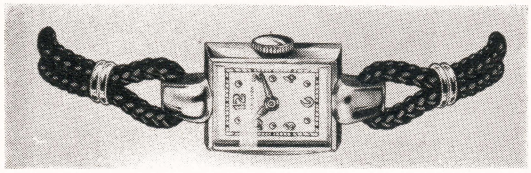




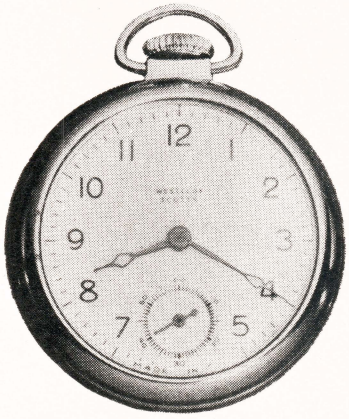
In sterling flatware, CU's design consultant cited three Reed & Barton patterns (far left): the plain Pointed Antique ($25.75 for 6-piece setting) as a good simple design and the Francis First ($31) and Burgundy ($28.75) as well-executed ornate designs. Tiffany's Faneuil ($35), above, was also picked for simplicity, and Gorham's Old French, ($28.75), at left above, as a good compromise between the simple and ornate. All were above average in CU's strength tests except the Pointed Antique, which had somewhat weak tines.

Among watch-stopwatch combinations, Movado ($120 up) was outstanding; it had separate movements.

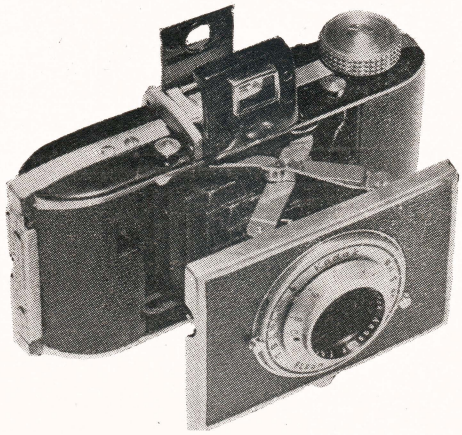


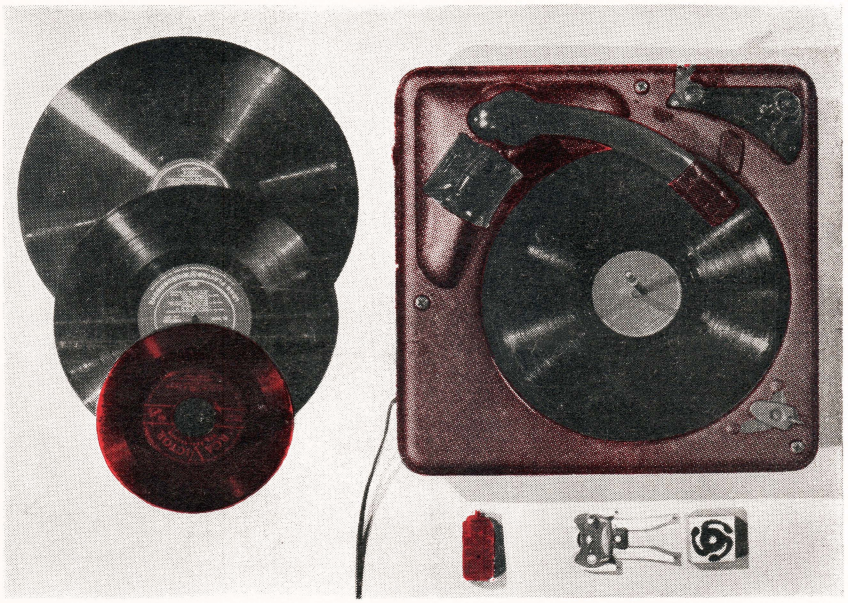


For $2.75 you can get a Westclox Scotty (left), rated well in its class, and for $250 up a Patek Phillipe (above), among the best. Also good are the Gruen Curvex line (Cadence, $49.75, at top) and Hamilton women's watches with "Medallion" or "M" movement ($100 Greta is shown).

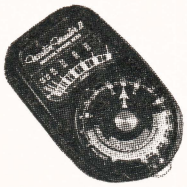


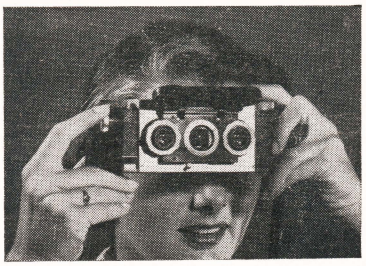
CU found the Webster 356-27 with magnetic heads a good three-speed changer; it's still sold, but new models are out

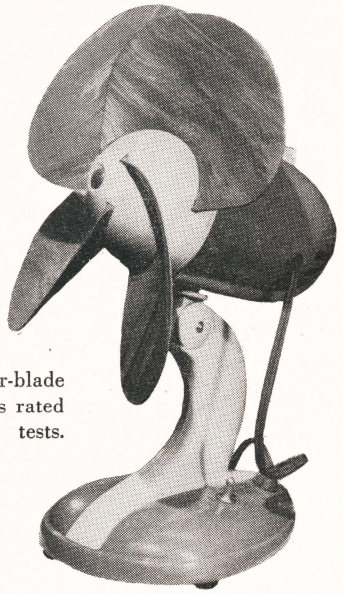




Photographic items CU rated Good: the Kodak Flash Bantam ($57.50), above; Stereo Realist viewer and camera ($20 and $162); Weston Master II exposure meter ($32).

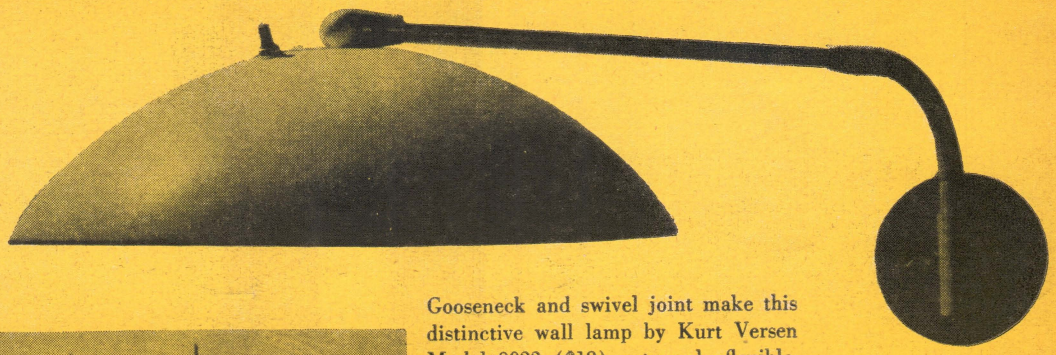




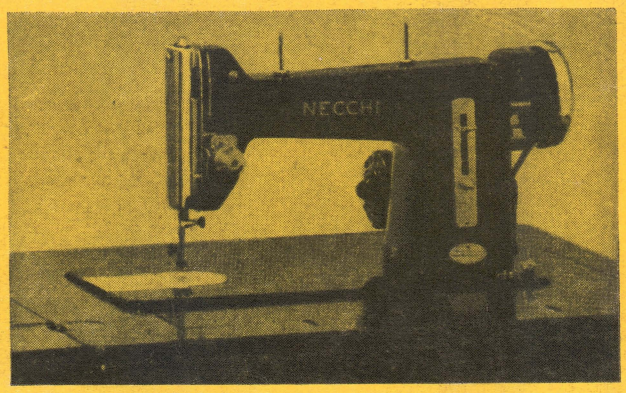


Samson Safe-Flex rubber-blade electric fan ($21.95) was rated the highest in CU's tests.

GIFTS continued

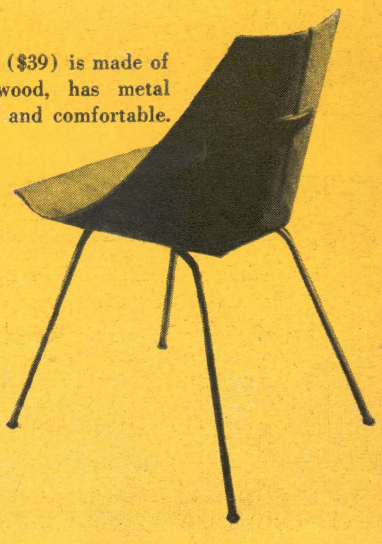


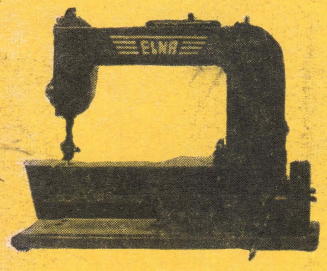
Gooseneck and swivel joint make this distinctive wall lamp by Kurt Versen Model 9022 ($18) extremely flexible.

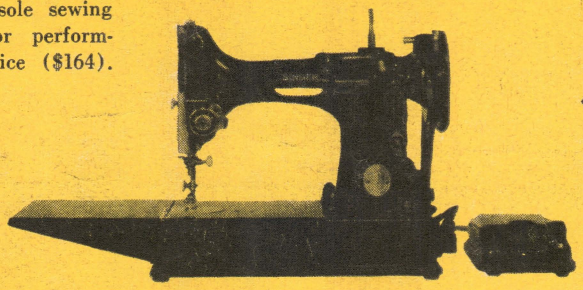


Italian Necchi BF-105 console sewing machine combined superior performance and relatively low price ($164).

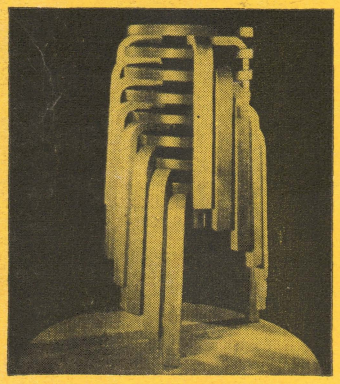
Komai chair ($39) is made of molded plywood, has metal legs, is light and comfortable.





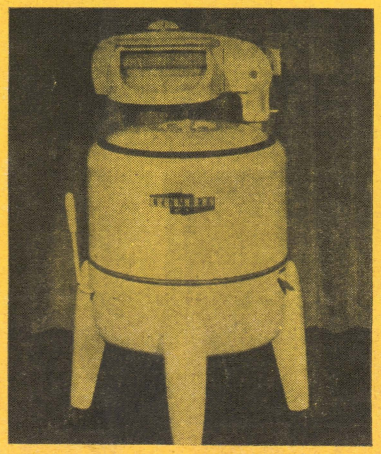


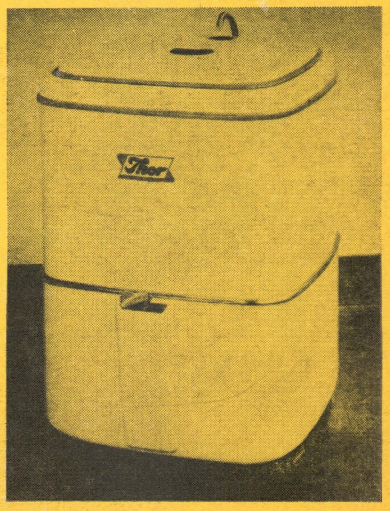
Swiss Elna (left) and Singer Featherweight 221-1 were the best portable machines tested. Elna ($179) had a "free lower arm" for easier darning. Singer ($150) was the lightest.



Several versions of Aalto-designed stacking stools are available in New York at $5 (Pascoe), $10 (Finsven), $12.50 (Today's House).

The Thor Model 244C (right, $210) was one of the best semi-automatic washers found.

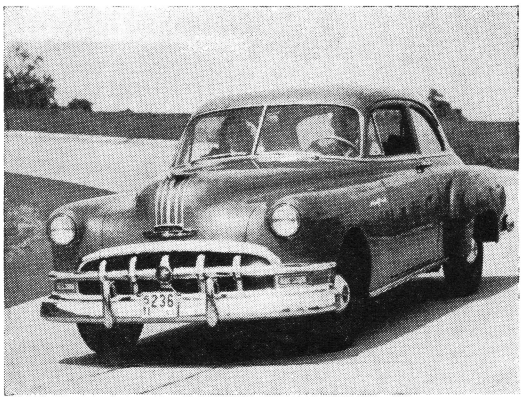


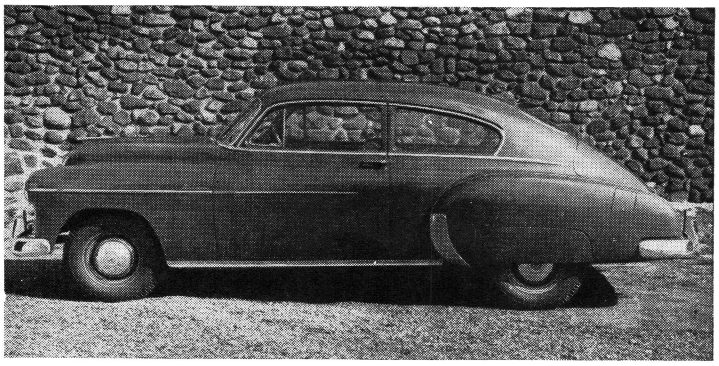


Sears Kenmore Cat. No. 26 KM 93220 (left, $92.95, plus shipping), did well in CU's tests and cost $35 to $45 less than comparable brands.

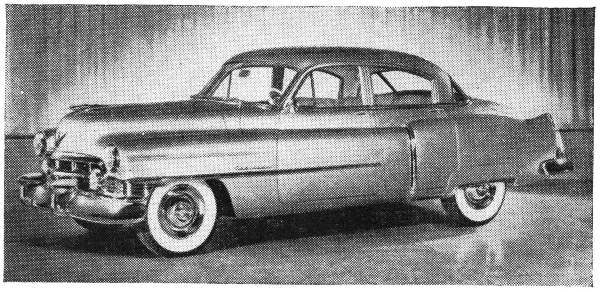
Plymouth Suburban six-passenger station wagon ($1840 factory-delivered) was rated the best dual-purpose car.

Pontiac Chieftain 8 (four-door sedan, $1813 at factory plus $158.50 for Hydramatic) was described as "one of the toughest cars in any group."

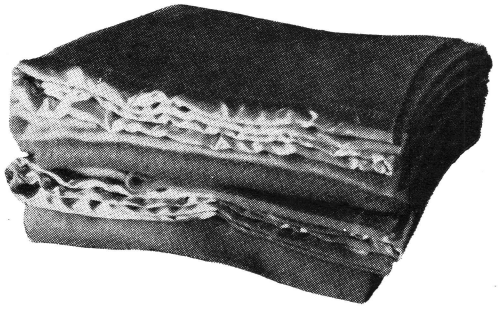




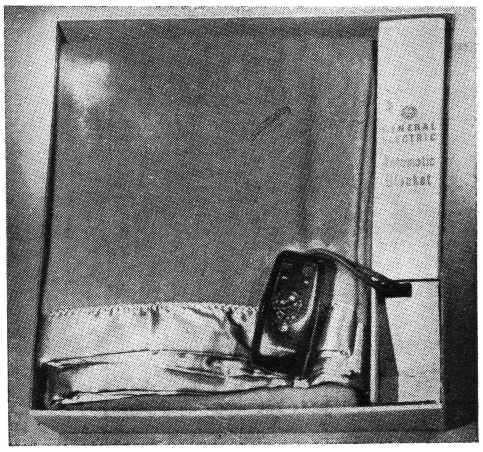
Chevrolet Powerglide ($1688 at factory) introduced the no-shift drive to the low-price field. Fleetline body is shown; Styleline is preferred.

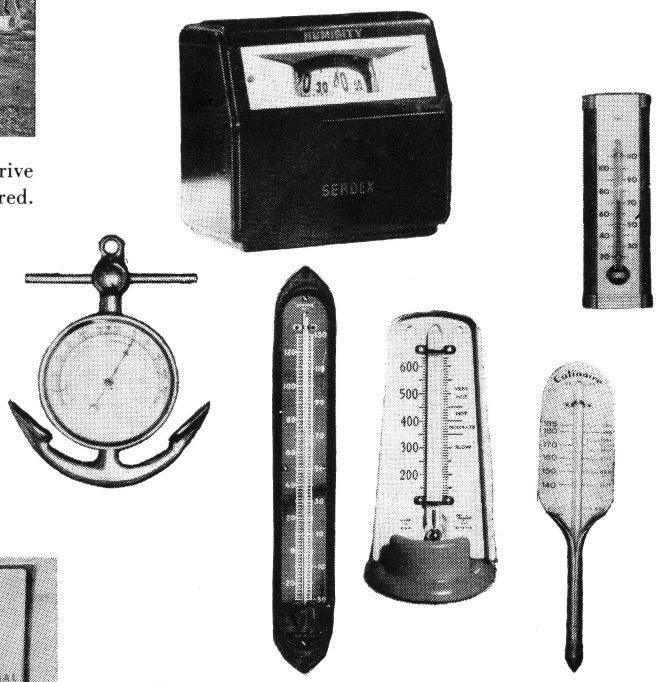


Cadillac V-8 (Model 61, $2866 at factory plus $175 for Hydramatic) is a premium car at a premium price.



Best wool blanket tested by CU that is still available was the Pendleton Rosario ($21.50). The General Electric PB 12 A 1 (double-bed size, $48.95 with single control; $59.95 with dual) was one of the best electric blankets tested, and the only high-ranking one in the tests still on sale.

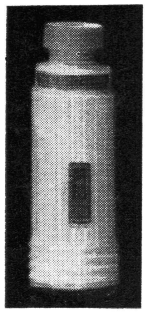




Serdex (top, $10) was the only Acceptable humidity indicator found in CU's tests. Two equally good indoor thermometers were the Taylor Wall No. 5109 (top right, $3) and the fancier Anchor (extreme left, $10). The Weksler Utility 265 (bottom left, $3.30) was rated best of outdoor thermometers. The Taylor No. 5928 ($3.25) was a good oven model, and the Culinaire ($2), a good meat thermometer.

CU's tests showed that the $55-$70 class offered the most for the money in men's suits. In this range suits made by J. Schoeneman, H. Daroff, and H. Freeman ranked highest. For stores where these and other brands are sold, see the October REPORTS.

Toni ($2.49, refill $1.20) and Smart Wave ($1.19 plus postage, from Wards, no refills) home wave kits had the most convenient curlers.

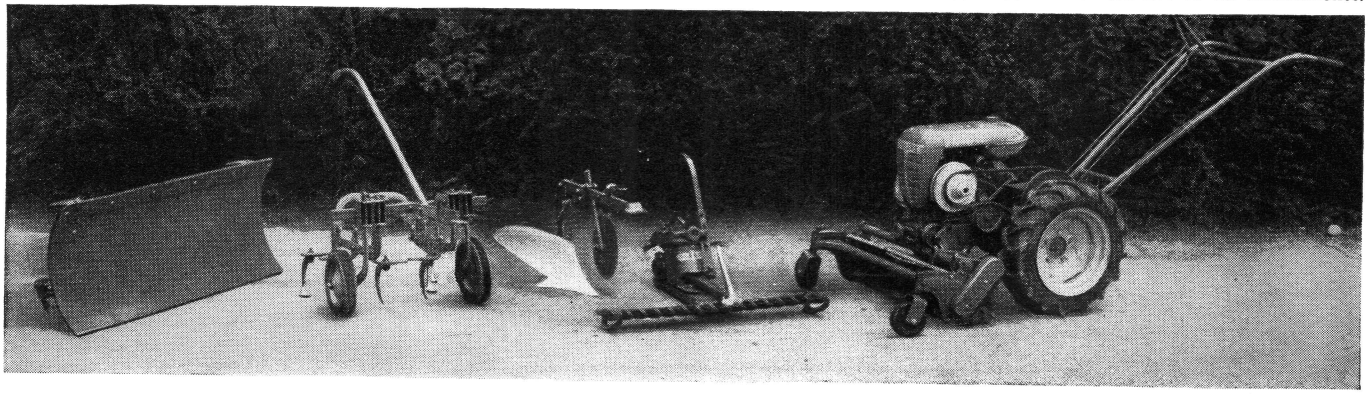


Cold creams rated Excellent included both the lotion-type Dermetics S. A. Cleanser (right), $1.80 for 4 oz., and Elizabeth Post (far right), 30¢ for 5 oz.

Various kinds of Bromeliads are among the attractive, easy-to-grow house plants listed in the October issue

Low price and high quality put Fruit of the Loom Extra Weight Type 140 muslin sheets among the Best Buys. The best percale found which is still available was the Sears Harmony House Type 200.

Best garden tractor tested was the Bolens Power-Ho Model 12BB ($188), shown with five of its attachments.



PORTABLE RADIOS

CU reports on 32 models, from camera-type to extra large; six earn Best Buy rating

Despite the fact that portable radios are chiefly for outdoor use in the summer, they are often given as Christmas presents. If you have a small radio on your shopping list, here are some general considerations:

Don't select a portable—that is, a set which can be operated with batteries, away from power sources—unless you really expect it to be used where house current is not available. Portables for battery operation are generally more expensive than comparable table model radios, and the tone quality is generally poorer.

If you do want a portable, don't consider just the list price—consider also the amount of use the set is likely to get and the resultant battery cost; whoever receives the set is going to have to pay for the batteries. He may not think so well of you next summer if your gift turns out to need $10 or $20 worth of batteries under circumstances in which another suitable set will get along with $3 or $4 worth.

Check the particular sample you buy. There can be much variation from sample to sample within a brand, and many "lemons" may find their way to the stores. Some advice on how to check a radio appears in the Buying Guide issue. In addition, be sure the batteries you get have not been used.

Portable sets are likely to get knocked about. It has been CU's experience generally that plastic cabinets are more easily damaged than wood or metal cabinets.

CU initiated tests on 32 sets. Tests on six of these were discontinued when it was found that they reproduced speech with much less loudness and intelligibility than otherwise comparable sets, even when tuned to a strong nearby station and with fresh batteries. Seven others were rated Not Acceptable because of shock or short-circuit hazard when used with house current. Two sets, Not Acceptable because of shock hazard when used on house current, were tested completely because the hazard could easily be eliminated with tape.

The Acceptable models fell into various groups. Of six sets which were for battery operation only, three were very small and light (camera-type). Of the three-way (a-c, d-c, battery) sets, six were heavy, four were medium-weight, two were light, and one was very light (camera-type). In general, the smaller and lighter models were inferior in performance, though there were some exceptions to this.

Six sets, as noted in the ratings, qualify as Best Buys under various conditions. Three, for example, are rated as Best Buys for use in metropolitan areas where strong signals are available; one is a Best Buy for people who insist on a very small "camera-type" set and don't mind having one which can't be used on house current. In selecting Best Buys, CU took into account estimated battery costs as well as the list price of the radio.

HOW CU RATED

CU gave major emphasis to three performance factors—loudness and intelligibility, sensitivity, and selectivity (freedom from various kinds of interference and noise).

LOUDNESS. Since a portable radio is meant to be used outdoors, special jury tests were devised to determine intelligibility of speech at maximum volume under noisy outdoor conditions.

As a result of these tests, only four of the Acceptable sets were rated Loud. None of these was small or light. Eight were rated somewhat poorer in loudness, including one light-weight radio, the Best Buy *Concord* (Air King). Five were rated Weak, and two were rated Very Weak. Tests on these were continued because of their low price. Testing was discontinued on six other models which failed the loudness test and which were otherwise comparable to those which did not fail.

Even a very weak set, of course, can be loud enough for enjoyment if you are close enough to it outdoors, or listen in a fairly quiet room.

SENSITIVITY. CU rated the sensitivity of these sets on the basis of three considerations.

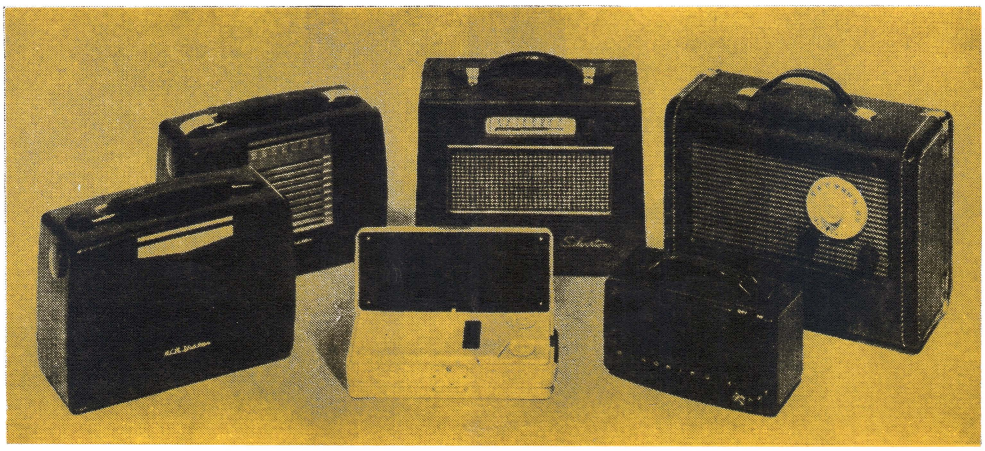
The first was the usual "usable sensitivity" test, described in several previous issues. This test determines the weakest signal (at three points on the dial) which can be clearly heard above the inherent hiss of the set. Added credit was given to those sets which were more or less equally sensitive at the three places on the dial.

Finally, consideration was given to the set's ability to bring in weak or distant stations loudly enough under noisy outdoor conditions. The $38.75 *Sears* and the $55.20

top left
RCA VICTOR
BX-57

top center
SEARS
SILVERTONE,

top right
WARDS AIRLINE



bottom left
RCA VICTOR
BX-55

bottom center
EMERSON

bottom right
CONCORD
(AIR KING)

The Wards Airline and the two RCA Victors shown above are Best Buys for those who want a relatively low-cost set with relatively low battery cost, and who do not listen to weak or distant stations. The Sears Silvertone is a Best Buy for weak or distant listening. The Concord (Air King) and the Emerson are Best Buys for those who are looking for a small or a very small (camera-type) set

Zenith—both sets with "three-gang" tuning—rated highest in this test. These sets are particularly recommended for use in rural areas remote from the stations to which the user listens. Two other Acceptable sets had three-gang tuning and rated high in sensitivity—the $45.70 *Westinghouse* and the $55.20 *RCA Victor.*

SELECTIVITY, NOISE, ETC. An ideal radio receiver would emit through its loudspeaker only the signal from the desired station, unspoiled by other programs or noises. Some FM receivers approach this ideal but AM sets never do. CU checked for freedom from extraneous sounds of seven types, technically known as (1) spurious interference, or "birdies"; (2) adjacent channel "blocking"; (3) adjacent channel modulation; (4) adjacent channel whistle; (5) second adjacent channel modulation; (6) second adjacent channel blocking; and (7) whistle modulation—the last of these a regrettable phenomenon which might be called "built-in birdies."

As in the case of sensitivity, the sets which showed the greatest freedom from extraneous sounds employed three-gang tuning—the $38.75 *Sears* and the $55.20 *RCA Victor.*

OTHER FEATURES. In rating the Acceptable sets, CU also took into consideration answers to the following questions:

Did the set have an effective automatic-volume-control action (AVC), so that the manual volume control did not have to be reset every time the set was tuned to another station or its position was shifted?

Was it difficult to tune?

Was the dial calibrated properly, so that a station on the 550 kc. channel came in near 550 on the dial, and a station on 1600 kc. came in near 1600?

How accessible were tubes and batteries? Would a service man be needed to replace them?

Was there some indication to warn against leaving the set on—and wearing out the batteries—inadvertently?

Was there audible hum when the set was used on a-c current? (This was tested only on the Best Buys and top sets on the quality list. Hum will in rare instances be reduced if the line plug in the wall socket is reversed.)

Finally, did the set embody a foolproof way of preventing the use of battery power while the set owner is under the impression that he is using house current? On the foolproof sets, the line plug must be plugged into a receptacle in the set before battery current can be turned on.

ECONOMY

The operating economy of portable radios depends in large part on how many hours a month or year they are run on their batteries. If the set is to be used on batteries only rarely, the batteries will lose most of their strength simply through aging. In that event, the relevant cost figures are the cost of the set and of a new set of batteries once every year or two, regardless of the battery economy statements in the ratings.

On the other hand, if the set is to be used with batteries for several hundred hours a year, then battery economy should be a large factor in your selection of a set.

In selecting the six Best Buys, CU considered both the original price and the operating cost.

Battery list prices were used in CU's calculations, and in the ratings, except that for sets sold through mail-order houses or radio parts stores the first set of batteries was calculated at the 20%-25% lower "net" price which such places charge. Batteries for all portable radios tested are available at the net price from these places.

Many sets require battery packs containing A and B batteries in a single unit, an arrangement which forces the set owner to discard both battery components whenever either one gives out. Despite this disadvantage, four of

the sets using such battery packs were judged to be sufficiently economical to warrant a Best Buy rating.

HAZARDS

Three sets were rated Not Acceptable because of short-circuit hazard when used on house current. Four others were similarly rated because of the possibility of severe shock when used on house current.

With two models—the *Emerson* 584A and the *Trav-Ler* 5022—there was the possibility of severe shock from two or three screwheads. Because the hazard can be readily eliminated and because these two models offer the advantage of being small, they are included in the Acceptable list, with the notation: "Not Acceptable for use on house current unless screwheads are covered with tape."

One Not Acceptable model—the *Zenith* G500—was unique in several ways, and is separately described on this page.

Three of the *Zenith* models require special battery packs. These appear to be safe for adult handling, but they can give a severe shock—about as severe as a wall socket can deliver—to a child with fingers small enough to get at the high-voltage battery prongs. This hazard is present only when the battery pack is not connected into the set.

A NOTE ON THE ZENITH G500

Ordinarily a radio or any other appliance which offers a serious possibility of severe shock is simply rated Not Acceptable by CU without further testing. An exception is made this month with the Zenith *G500. It had several unique qualities, and at $105.25, it was far and away the most expensive set tested. It had the lowest battery cost per hour of any of the sets tested (about $2 per 100 hours).*

The Zenith *G500 is very large and very heavy for a portable. It had a leatherette-covered wood cabinet. It was loud, sensitivity was very high, and interference rejection was fair, with the possibility of some birdies. Automatic-volume control action was good, as was dial calibration. This was the only set tested which had a tone control, and the only one with provision for shortwave reception.*

Except for shock hazard the Zenith *G500 would have been rated at the head of the Acceptable list. For use on house current it is rated Not Acceptable since there is the possibility of a severe shock at many points on the set, and no simple way to eliminate the hazard. In addition, as with other* Zenith *portables, there is a limited shock hazard in the handling of the battery pack (see story).*

RATINGS OF 33 PORTABLE RADIOS: All sets operate on a-c, d-c, and with batteries unless otherwise noted. For explanation of size and weight terms, see page 485. For explanation of performance terms, see story. Prices include cost of one set of batteries.

BEST BUYS

¶ *Selection of Best Buys was based on estimated overall quality, price, and battery cost.*

¶ *The following three sets are Best Buys for those who want a relatively low-cost set which is relatively economical of batteries, and who do not listen to weak or distant stations; they are listed in order of increasing price.*

■■ **WARDS** Airline Cat. No. 62 A 1161M (Montgomery Ward). $24.95 plus shipping charges. Uses $5.25 battery pack (about $6 per hundred hours). Large, heavy, wood cabinet with brown leatherette. Loud on strong stations, inadequately loud on weak or distant stations under noisy or outdoor conditions. Sensitivity generally high, but only fairly high toward lower end of dial. Selectivity fair; possibility of bad birdies. Automatic-volume-control action fair. Dial calibration good. Rather difficult to tune accurately. It is possible to wear down batteries while set is plugged into house current. Inadequate "On" indicator. Batteries and tubes convenient to replace. Very objectionable hum on a-c.

■■ **RCA VICTOR** BX-55 (RCA Victor Div., Camden, N. J.). $34.90. Uses $4.95 battery pack (about $5 per hundred hours). Medium size, medium weight, brown plastic cabinet. Sensitivity high. Loud, but loudness on weak or distant stations inadequate under noisy or outdoor conditions. Selectivity poor; possibility of bad birdies. Automatic-volume-control action fair. Very slight hum on a-c. Dial calibration fair. No "On" indicator. Tubes fairly convenient to replace; batteries convenient to replace, but no handle on battery plug.

■■ **RCA VICTOR** BX-57 (RCA Victor Div.). $39.90. Uses $4.95 battery pack (about $6 per hundred hours). Medium size, medium weight, brown plastic cabinet. Loud. Sensitivity generally high, but only fairly high toward lower end of dial. Selectivity fair; possibility of bad birdies. Automatic-volume-control action good. Objectionable hum on a-c. Dial calibration fair. No "On" indicator. Tubes fairly convenient to replace; batteries easy to replace.

¶ *The following is a Best Buy for receiving weak or distant stations:*

■■ **SEARS** Silvertone Cat. No. 57 ET 226 (Sears-Roebuck). $38.75 plus shipping charges. Uses $5.75 battery pack (about $4 per hundred hours). Large, heavy, wood cabinet with tan leatherette. Fairly loud. Sensitivity very high. Selectivity good, birdies very unlikely. Automatic-volume-control action good. Slight hum on a-c. Dial calibration fair. No "On" indicator. Tubes and batteries easy to replace.

¶ *The following is a Best Buy only for those who want a small, light set:*

■■ **CONCORD** Cat. No. 1J430 (Concord Radio Corp., Chicago). $24.14 plus shipping charges. Set delivered under this number was the *Air King* A-520A. Uses $3.30 set of batteries. Battery economy poor (about $11 per hundred hours). Small, light, maroon plastic cabinet. Fairly loud; but loudness on weak or distant stations inadequate under noisy or outdoor conditions. Sensitivity low. Selectivity poor; possibility of bad birdies. Automatic-volume-control action poor. Objectionable hum on a-c. Dial calibration good. Difficult to tune accurately. Inadequate "On" indicator. Tubes fairly convenient to replace; batteries somewhat inconvenient to replace. It is possible to wear down batteries while set is plugged into house current.

¶ *The following is a Best Buy only for those who want a camera-type set for battery operation only:*

■■ **EMERSON** 640 (Emerson Radio & Phono. Corp., NYC). $24.95. For battery operation only. Uses $2.45 set of batteries (about $7 per hundred hours). Very small, very light (camera-type), maroon or cream plastic cabinet. Loudness on weak or distant stations inadequate under noisy or outdoor conditions; weak even on strong stations. Sensitivity generally low, but fairly high toward both ends of dial. Selectivity fair; possibility

of bad birdies. Automatic-volume-control action fair. Dial calibration fair. Crowded tuning dial; difficult to tune accurately. Tubes fairly convenient to replace; batteries convenient to replace, but insides of set must be exposed.

ACCEPTABLE

¶ In order of estimated overall quality without regard to price, size, weight, or battery costs.

¶ The following eight radios were judged about equally satisfactory overall.

■ **ZENITH** G503-Y (Zenith Radio Corp.). $55.20. Uses $5.25 battery pack (about $4 per hundred hours). Large, heavy wood cabinet with black leatherette finish. Fairly loud. Very high sensitivity. Selectivity fair: birdies very unlikely. Good automatic-volume-control action. Objectionable hum on a-c. Good dial calibration. Batteries and tubes convenient to replace; could give severe shock to child handling battery pack (see story).

■ **WESTINGHOUSE** H-309P5U (Westinghouse Electric Corp., Sunbury, Pa.). $45.70. Uses $5.75 battery pack. Battery economy poor (about $10 per hundred hours). Large, medium-weight, green plastic cabinet. Loud. Sensitivity generally high, but only fairly high toward lower end of dial. Selectivity poor; birdies very unlikely. Fair automatic-volume-control action. No audible hum. Fair dial calibration. No "On" indicator. Batteries and tubes convenient to replace.

■■ **SEARS** Silvertone Cat. No. 57 ET 226 (Sears-Roebuck). $38.75 net plus shipping charges. See Best Buys, above.

■■ **RCA VICTOR** BX-57 (RCA-Victor Div.). $39.90. See Best Buys, above.

■ **RCA VICTOR** BX-6 (RCA Victor Div.). $55.20. Uses $5.25 battery pack (about $3 per hundred hours). Large, heavy, aluminum-and-brown-plastic cabinet. Fairly loud; but loudness on weak or distant stations inadequate under noisy or outdoor conditions. Sensitivity generally high, but only fairly high toward upper end of dial. Selectivity good; birdies very unlikely. Automatic-volume-control action good. Dial calibration good. Tubes convenient to replace; batteries inconvenient to replace (screwdriver required).

■■ **WARDS** Airline Cat. No. 62 A 1161M (Montgomery Ward). $24.95 plus shipping charges. See Best Buys, above.

■ **ZENITH** 4G903-Y (Zenith Radio Corp.). $45.20. Uses $5.25 battery pack (about $3 per hundred hours). Large, heavy, black plastic cabinet. Fairly loud. Sensitivity high. Selectivity fair; possibility of some birdies. Automatic-volume-control action fair. Dial calibration good. Batteries and tubes convenient to replace; could give severe shock to child handling battery pack (see story).

■■ **RCA VICTOR** BX-55 (RCA Victor Div.). $34.90. See Best Buys, above.

¶ Differences in estimated overall quality between adjacent sets among the following were judged to be small:

■ **GENERAL ELECTRIC** 601 (General Electric Co., Syracuse, N. Y.). $35.70. Uses $5.75 battery pack. Battery economy poor (about $10 per hundred hours). Medium-size, medium-weight, maroon plastic cabinet. Fairly loud; but loudness on weak or distant station inadequate under outdoor or noisy conditions. Fairly high sensitivity: but sensitivity low toward upper end of dial. Selectivity fair; possibility of bad birdies. Automatic-volume-control action fair. Dial calibration fair. No "On" indicator. Batteries and tubes convenient to replace.

■ **SEARS** Silvertone Cat. No. 57 ET 221 (Sears-Roebuck). $31.50 plus shipping charges. Uses $5.25 battery pack (about $6 per hundred hours). Large, heavy, maroon plastic cabinet. Fairly loud. Low sensitivity. Selectivity fair; possibility of very bad birdies. Automatic-volume-control action fair. Dial calibration good. No "On" indicator. Inconvenient to replace tubes (screwdriver required); batteries convenient to replace.

■ **GENERAL ELECTRIC** 600 (General Electric Co.). $25.70. For battery operation only. Uses $5.75 battery pack. Battery economy poor (about $9 per hundred hours). Medium-size, medium-weight, maroon plastic cabinet. Fairly loud, but loudness on weak or distant stations inadequate under noisy or outdoor conditions. Sensitivity fairly high, especially near center of dial. Selectivity fair; possibility of very bad birdies. Automatic-volume-control action poor. Dial calibration good. No "On" indicator. Tubes and batteries convenient to replace.

■■ **CONCORD** Cat. No. 1J430 (Concord Radio Corp.). $24.14 plus shipping charges. See Best Buys, above.

■ **AIR KING** A-520A (Air King Prod. Co., Brooklyn). $32.25. See the $24.14 *Concord* Best Buy rating, above.

■ **EMERSON** 584A (Emerson Radio & Phono. Corp.). $39.95. Uses $2.90 set of batteries. Battery economy extremely poor (about $21 per hundred hours). Very small, very light (camera-type) cream plastic cabinet. Only camera-type set tested which could be operated on house current. Sensitivity fairly high, but somewhat lower toward upper end of dial. Loudness on weak or distant stations inadequate under noisy or outdoor conditions; weak even on strong stations. Selectivity fair; possibility of bad birdies. Automatic-volume-control action fair. Dial calibration good. Crowded tuning dial. Tubes fairly convenient to replace; batteries convenient to replace, but insides of set must be exposed. Not Acceptable for use on house current because of shock hazard—unless three large screwheads on front panel are covered with tape.

■■ **EMERSON** 640 (Emerson Radio & Phono. Corp.). $24.95. See Best Buys, above.

¶ Differences in estimated overall quality between adjacent sets among the following five were judged to be small:

■ **WARDS** Airline Cat. No. 62 A 1064M (Montgomery Ward). $19.95 plus shipping charges. For battery operation only. Uses $2.45 set of batteries (about $6 per hundred hours). Very small, very light (camera-type), red plastic and metal cabinet. Loudness on weak or distant stations inadequate under noisy or outdoor conditions: very weak even on strong stations. Sensitivity fairly high, but low toward lower end of dial. Selectivity poor: possibility of bad birdies. Automatic-volume-control action fair. Dial calibration good. Difficult to tune accurately. Batteries convenient to replace: tubes cannot be replaced without removing chassis.

■ **TRAV-LER** 5022 (Trav-Ler Radio & Television Corp., Chicago). $22.50. Uses $2.55 set of batteries (about $6 per hundred hours). Small, light, brown-and-white, wood-and-plastic cabinet. Loudness on weak or distant stations inadequate under noisy or outdoor conditions; weak even on strong stations. Sensitivity low, especially toward lower end of dial. Selectivity poor: possibility of bad birdies. Automatic-volume-control action poor. Dial calibration fair. Knobs extremely difficult to operate. Inadequate "On" indicator. It is possible to wear down batteries while set is plugged into house current. Batteries convenient to replace: tubes cannot be replaced without removing chassis. Not Acceptable for use on house current because of shock hazard—unless two screwheads on bottom of set are covered with tape.

■ **SEARS** Silvertone Cat. No. 57 ET 211 (Sears-Roebuck). $16.95 plus shipping charges. For battery operation only. Uses $2.55 set of batteries. Battery economy poor (about $10 per hundred hours). Small, light, green plastic cabinet. Loudness on weak or distant stations inadequate under noisy or outdoor conditions; weak even on strong stations. Sensitivity low: very low toward lower end of dial. Selectivity fair: possibility of very bad birdies. Automatic-volume-control action poor. Dial calibration poor. Difficult to tune accurately. Inadequate "On" indicator. Tubes cannot be replaced without removing chassis; batteries inconvenient to replace (screwdriver required).

■ **ARVIN** 446P (Noblitt-Sparks Industries, Inc., Columbus, Ind.). $19.50. Tan plastic cabinet; except for cabinet details, appeared to be identical and performance ratings are identical with *Sears* model immediately above.

■ **EMERSON** 645 (Emerson Radio & Phono. Corp.). $22.75. For battery operation only. Uses $2.80 set of batteries (about $7 per hundred hours). Small, light, maroon plastic cabinet. Loudness on weak or distant stations inadequate for listening under noisy or outdoor conditions: very weak even on strong stations. Sensitivity fairly high, but low

small

very large

camera size

Sets were classified as very small (camera-type), small, medium, large, and very large. Size and weight generally corresponded—the very small sets were very light and so on. Only one of the camera-type sets tested, the Emerson 584A, operates on home current as well as on batteries

toward both ends of dial. Selectivity poor; possibility of bad birdies. Automatic-volume-control action fair. Dial calibration good. No "On" indicator. Batteries and tubes convenient to replace.

Not tested completely (see story)

¶ *Tests on the following six sets were discontinued when it was found that they had only weak or very weak sound, even when tuned to strong nearby stations. Neither price nor other characteristics made these sets seem worth testing further. Listed in alphabetical order.*

O **CROSLEY** 11-302U (Avco Mfg. Corp., Cincinnati). $47.40.

O **EMERSON** 656 Series B (Emerson Radio & Phono Corp.). $45.20.

O **EMERSON** 646 Series B (Emerson Radio & Phono Corp.). $33.50.

O **MOTOROLA** 5L1U (Motorola, Inc., Chicago). $27.50.

O **MOTOROLA** 6L1 (Motorola, Inc.). $45.20.

O **PHILCO** 51-631 Code 121 (Philco Corp., Philadelphia). $37.50.

NOT ACCEPTABLE

¶ *The following four sets were rated Not Acceptable because of the possibility of strong shock when used on house current. Listed in alphabetical order.*

O **ADMIRAL** 4R12 (Admiral Corp., Chicago). $38.25.

O **WARDS** Airline Cat. No. 62 A 1159Y (Montgomery Ward). $49.95 plus shipping charges.

O **ZENITH** G402 (Zenith Radio Corp.). $42.80.

O **ZENITH** G500 (Zenith Radio Corp.). $105.25. See page 483.

¶ *The following three sets were rated Not Acceptable because of short-circuit hazard when used on house current.*

¶ *In alphabetical order.*

O **CONCORD** Cat. No. 1A653 (Concord Radio Corp.) $47.95 plus shipping charges. (Set delivered to CU under this catalog number was a *Lafayette.*)

O **LAFAYETTE** Cat. No. 1-427 (Lafayette Radio, NYC). $23.25 plus shipping charges.

O **LAFAYETTE** Cat. No. 1E651 (Lafayette Radio). $44.15 plus shipping charges.

CU's ANNUAL MEETING AND ELECTION

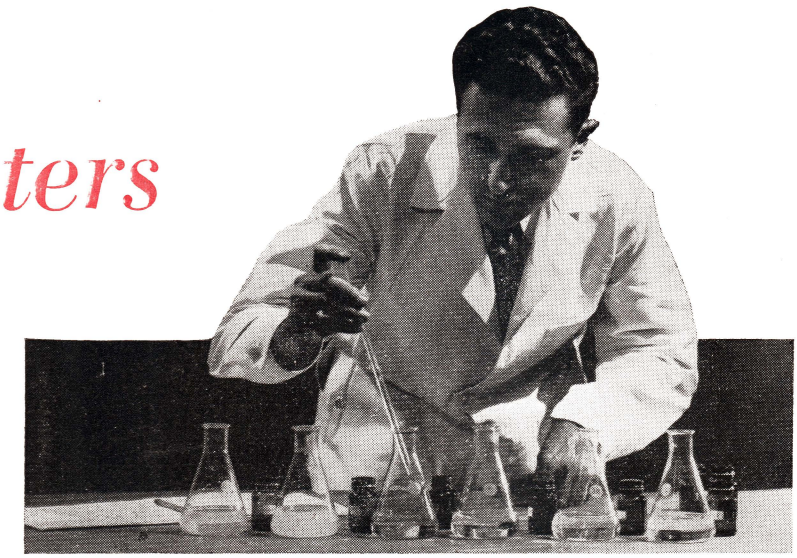
The annual meeting of CU's members was held September 27, 1950, in CU's offices at 38 East 1st Street, New York City. The results of the balloting for new members of the board of directors were announced as follows:

A total of 58,221 ballots were mailed in, of which 7,425 could not be counted because no names were marked and 155 were invalid for various reasons. The results of voting on the 50,641 valid ballots were as follows (the five top-ranking candidates were elected):

Arthur Kallet	38,743	Dr. Harry Grundfest	24,146
Bernard J. Reis	32,105	Jerome R. Hellerstein	19,587
Dr. Alex Bavelas	29,139	John S-R. Shad	18,601
Sidney Margolius	27,917	Saul Kozuck	16,763
Dr. Frank Beube	27,369	Donald C. Swanson	15,639

CU's annual questionnaire, sent out to subscribers along with the ballot, is now being tabulated. A report on some questions of interest will be published in an early issue of CONSUMER REPORTS.

toilet waters



CU's CONSULTANT TESTED 41 FOR FRAGRANCE, STABILITY, STRENGTH, LASTING POWER

Toilet waters and colognes have grown in popularity during the postwar years more than the expensive and usually much more concentrated perfumes. The colognes, which once were special preparations built primarily around citrus oils, are today more often just the next step down the ladder in cost and concentration, weaker and cheaper than toilet waters. Frequently, however, the terms "cologne" and "toilet water" are used interchangeably, even in the trade.

Both are economical sources of perfume essences for consumers. Most regular perfumes come in fancy bottles and outside boxes which you have to pay for. Toilet waters and colognes, on the other hand, generally have much simpler packaging. A certain amount of dilution in the perfume base may be an advantage, too. It is probably easier to control the strength of the odor with a toilet water or a cologne than with a perfume.

Although there's a lot of hokum in the selling of perfume products, there is also a good deal of skill in the making and blending of them. They require, first, the natural essences of flowers, fruits, gums, balsams, etc. Synthetic substitutes may be and often are used, and some common perfume synthetics have aromas which are not found naturally. The formulation of pleasing scents, by combining fragrant oils—sometimes a dozen or more in one product—with fixatives to retard odor dissipation and heighten the scent, and with alcohol for dilution, is a job for expert hands.

The different aromatic oils in perfume bases evaporate at different rates, which is why the odor of a product may change after it is applied. The first whiff from the bottle is called the "top note." After the toilet water has been worn a little while, you can smell the basic odor. When the fragrance is finally fading away, you get the "end odor." In a well-formulated product these will be similar. An unstable toilet water may at first be just what the wearer wants, but an hour later she (or others) may be wondering where that strange odor is coming from. The experts advise you not to judge a toilet water or cologne by the top note. They recommend that you put on a dab of the product and wait a few minutes before you do your decisive sniffing.

Different toilet waters also have different lasting qualities. In general, floral scents are relatively fleeting, while the amber ones are comparatively lasting. The "chypre-crepe de chines" and the "aldehydes" come in between.

A trade association called the Fragrance Foundation has tried to take some of the nonsense out of the ads for scents. According to the Foundation, advertisements stressing the irresistibility or the rareness of the essences have boomeranged. Many women, apparently, had got the impression that perfume products were primarily big-date accessories not suitable (or maybe not safe) for ordinary wear. "If this approach is continued," the Foundation's chairman announced, "our position in a few years certainly will not be an enviable one. . . ." *Printers' Ink*, an advertising trade magazine, put it a little more succinctly: ". . . you'll be seeing less sex and more sell. . . ."

The choice of a scent is, of course, a personal matter—with emphasis on the preference of the person who's going to wear it, be it yourself or someone for whom you are buying a gift. Expert advice, however, can be helpful. For virtually any particular type of odor there are a number of brands of toilet waters or colognes on the market, some good buys and others not so good. CU's perfume consultant rated 41 brands of toilet waters (or colognes if toilet waters were unavailable) on the basis of "organoleptic" tests.

Organoleptic testing—testing which depends on a particular sense organ—is a recognized technique in many fields, including, for example, the coffee and tea and alcoholic beverages industries as well as perfumery. Although these tests depend on sense perception, they are designed to minimize the expert's individual taste or preference; they cover, for example, such qualities as lasting power or constancy. The factors considered by CU's consultant in testing toilet waters and colognes were the pleasantness of the scents, their stability, strength, and lasting power. In addition to the overall quality ratings,

Ann Barton Lily of the Valley cost 21¢ an ounce and rated Excellent. Macy's Carnation (30c an oz.) and Chanel No. 5 ($3 an oz.) rated Good, Guerlain Shalimar ($3) Fair. Dilution tests (far left) were one of two types of smell tests performed

running from Excellent to Poor, descriptions of the scent and comments on its strength and lasting power are included in the listing.

The reliability of these organoleptic tests is reflected in the close agreement between CU's 1947 ratings of toilet waters and colognes and the current ones. The two sets of ratings were based on tests by different consultants, but the descriptions of the scents are quite similar, and, with only two exceptions, differences in overall quality ratings are small. The two exceptions are *4711 Blue & Gold Cologne*, which went from Good to Poor, and *Stradivari* Eau de Toilette, which went from Poor to Good. Whether in the three years since the last tests the two products themselves have changed, or the difference represents a disagreement between consultants, CU does not know.

All the tests on toilet waters were performed on samples presented to the consultant in identical bottles identified only by a code number. He was given two separately purchased samples of each brand, so numbered as to conceal which were duplicates. Where significant discrepancies between samples of any brand were found, the tests were repeated, and occasionally a third sample purchased. In a few cases different samples of the same brand were found to be clearly different, sometimes even in color.

The tests used on the toilet waters and colognes are standard ones for perfume products. Strips of blotting paper were dipped into the products and sniffed immediately for a determination of their top notes. The strips were then hung up and their odors checked after half an hour, an hour and a half, and 24 hours. A few drops of the samples were diluted with water in a ratio of 50 to 1 and the solution was also sniffed at intervals.

In price the products ranged all over the lot. One, Elizabeth Post's *Apple Blossom* cologne, cost 4c an ounce at Kress's; two, *Chanel No. 5* toilet water and *Shalimar* Eau de Toilette, cost $3 an ounce. Price could not be counted on to indicate high quality. One floral-type cologne, *Ann Barton* Lily of the Valley, sold by Sears-Roebuck, was rated Excellent and cost only 21c an ounce, and a number of other Excellent and Good toilet waters and colognes were priced well under a dollar an ounce. *Shalimar*, at $3 an ounce, was rated only Fair, and *Evening in Paris* Eau de Toilette, at $1.11 an ounce, was considered Poor.

If you're buying toilet water for yourself you may want to spend only a little and get a lot for your money; but on the other hand, economy isn't always a consideration when you're buying a gift, and you may feel it quite necessary to buy a well-known and expensive brand. In either case, the ratings can serve as a guide—an informed guide, although one with which you may not agree.

RATINGS OF TOILET WATERS: 41 brands, grouped according to type of scent, are listed within groups in order of overall quality; those of the same quality in any group are in order of increasing price. Ratings are based on tests by an expert to determine quality of scent, stability, strength, and lasting power (see story). Prices quoted are averages of the prices paid by CU's shoppers and include the 20% Federal cosmetic tax; figures in parentheses are cost per fluid ounce. **E** stands for Excellent, **G** for Good, **F** for Fair, **P** for Poor.

ACCEPTABLE

Floral odors

■ **ANN BARTON** Lily of the Valley Cologne, Cat. No. 8 E 5666E (Sears-Roebuck). 83¢ plus postage for 4 fl. oz. (21¢). Muguet (lily of the valley), lily type. Medium strength; lasting. E.

■ **LILY OF THE VALLEY** Toilet Water (Ann Haviland, NYC). $3.30 for 4 fl. oz. (83¢). Muguet, tea rose type. Medium strength; lasting. E.

TOILET WATER continued

■ **INTOXICATION** Eau de Toilette (D'Orsay, NYC). $6 for 4 fl. oz. ($1.50). Lily, spicy type. Strong, lasting. Very good.

■ **PARK & TILFORD** Lily of the Valley De Luxe Cologne (Park & Tilford, NYC). 30¢ for 1.37 fl. oz. (22¢). Floral, hyacinth type. Medium strength; lasting. G.

■ **MACY'S CARNATION** Toilet Water (R. H. Macy & Co., NYC). $2.38 for 8 fl. oz. (30¢). Carnation. Medium strength; lasting. G.

■ **EARLY AMERICAN** Old Spice Toilet Water (Shulton, Inc, Clifton, N. J.). $1.20 for 4 fl. oz. (30¢). Carnation, spicy type. Strong and lasting. G.

■ **DEBUTANTE** Magic Moment Toilet Water (Daggett & Ramsdell, Inc., Newark, N. J., distrib. by Fuller Brush Co., Hartford, Conn.). $1.32 for 4 fl. oz. (33¢). Spicy lily. Medium strength; lasting. G.

■ **"JE REVIENS"** Eau de Cologne (Worth, NYC). 83¢ for 2 fl. oz. (42¢). Spicy lily with aldehyde note. Medium strength; lasting. G.

■ **MORNING GLORY** Cologne (Jergens, Cincinnati). 43¢ for 1 fl. oz. (43¢). Floral bouquet. Medium to weak; fairly lasting. G.

■ **JEALOUSY** Bouquet Concentrate (Blanchard, NYC). $2.40 for 4 fl. oz. (60¢). Musky rose bouquet. Strong; lasting. G.

■ **BLUE CARNATION** Oeillet Bleu Eau de Cologne (Roger & Gallet, NYC). $1.80 for 3 fl. oz. (60¢). Carnation. Strong; lasting. G.

■ **"NOSEGAY"** Cologne (Dorothy Gray, Ltd., NYC). $3 for 4 fl. oz. (75¢). Carnation, lily type. Medium strength; lasting. G.

■ **NEW HORIZONS** Eau de Toilette (Parfums Ciro, NYC). $5.40 for 4 fl. oz. ($1.35). Lily type, slightly spicy. Medium strength; lasting. G.

■ **ARPEGE** Eau de Lanvin (Lanvin-Parfums, Inc., NYC). $7.50 for 4 fl. oz. ($1.88). Muguet with rose note. Medium strength; lasting. G.

■ **BLUE GRASS** Toilet Water (Elizabeth Arden, NYC). $6 for 3 1/16 fl. oz. ($1.66). Duplicate samples were of different colors and had slightly different odors. Floral bouquet. Medium strength; lasting. Fairly good.

■ **BLUE WALTZ** Concentrated Cologne (Blue Waltz Distrib., NYC). 32¢ for 3 fl. oz. (11¢). Carnation, lily type. Medium to weak; fairly lasting. F.

■ **TWEED** Bouquet Lenthéric (Lenthéric, NYC). $1.50 for 3½ fl. oz. (43¢). $1.92 for 3½ fl. oz. in atomizer bottle (55¢). Carnation, spicy type. Medium to weak; fairly lasting. F.

■ **APRIL SHOWERS** Eau de Toilette (Cheramy, NYC). $1.20 for 2 fl. oz. (60¢). Floral bouquet. Medium strength; fairly lasting. F.

■ **GOLDEN CHANCE** Cologne (Harriet Hubbard Ayer, NYC). $2.40 for 4 fl. oz. (60¢). Fruit blossom. Medium to weak; fairly lasting. F.

■ **NO. 4711** Eau de Cologne Classic Blue & Gold (Ferd Mulhens, Inc., NYC). $1.80 for 3.72 fl. oz. (48¢). Orange blossom. Weak; faded rapidly. P.

■ **SKYLARK** Lilting Fragrance (Barbara Gould, NYC). $2 for 4 fl. oz. of toilet water and ½-dram bottle of perfume (50¢). Fruit blossom bouquet. Weak; faded rapidly. P.

■ **EVENING IN PARIS** Eau de Toilette (Bourjois, NYC). $2.10 for 1 9/10 fl. oz. ($1.11). Violet. Weak; faded rapidly. P.

Amber (fragrant resins)

■ **BREATHLESS** Eau de Cologne (Charbert, NYC). $3.90 for 4 fl. oz. (98¢); $2.10 for 2 fl. oz. Gift Atomizer package ($1.05). Amber. Strong; very lasting. E.

■ **TABU** Colonia (Dana Perfumes, Inc., NYC, distrib. by Consolidated Cosmetics, Chicago). $4.20 for 4 fl. oz. ($1.05); $2.40 for 2 fl. oz. ($1.20). Dry woody amber. Strong; very lasting. E.

■ **SUSPICION** Eau de Toilette (Sardeau, NYC). $2.40 for 2 fl. oz. ($1.20). Heavy spicy amber. Strong; lasting. GE.

■ **HEAVEN-SENT** Eau de Toilette (Helena Rubinstein, NYC). $2.10 for 4 fl. oz. (53¢). Floral amber, heliotrope character. Medium strength; lasting. G.

■ **COBRA** Cologne (Parfums Weil Paris Co., NYC). $5.40 for 4 fl. oz. ($1.35). Floral amber, Crepe de Chine note. Medium strength; lasting. G.

■ **TOUJOURS MOI** Eau de Toilette (Corday, NYC). $7.80 for 4 fl. oz. ($1.95). Amber with spicy note. Strong; lasting. G.

■ **WOODSPRITE** Toilet Water (Beauty Counselors, Inc., Grosse Pointe, Mich.). $2.88 for 3 fl. oz. (96¢). Aldehydic amber. Weak; faded rapidly. F.

Aldehydes (synthetic odor)

■ **GEMEY** Toilet Water (Richard Hudnut, NYC). $3 for 4 fl. oz. (75¢). Aldehydic floral bouquet. Medium to weak; fairly lasting. G.

■ **L'AIMANT** de Coty Eau de Toilette (Coty, NYC). $8.10 for 4.74 fl. oz. ($1.71); $2.22 for 1.18 fl. oz. ($1.88). Lily-aldehyde type. Medium to weak; lasting. G.

Chypre-Crepe de Chine (florals with fragrant resins)

■ **APHRODISIA** Cologne Extraordinaire (Fabergé, Inc., NYC). $4.20 for 4 fl. oz. ($1.05); $2.40 for 2 fl. oz. ($1.20). Crepe de Chine type. Strong; lasting. E.

■ **CHANTILLY** Eau de Toilette (Houbigant, NYC). $4.50 for 4 fl. oz. ($1.13). Sweet Crepe de Chine. Medium strength; lasting. G.

■ **"SHOCKING"** de Schiaparelli Eau de Cologne (Parfums Schiaparelli, Inc., NYC). $6 for 4 fl. oz. ($1.50). Crepe de Chine, floral. Medium to strong; lasting. G.

■ **CHANEL** No. 5 Toilet Water (Chanel, Inc., NYC). $12 for 4 fl. oz. ($3). Chypre with rose and violet notes. Medium to weak; faded rapidly. G.

Miscellaneous

■ **STRADIVARI** Eau de Toilette (Prince Matchabelli, NYC). $7.50 for 4 fl. oz. ($1.88). Woody bouquet, cedar character. Medium strength; lasting. G.

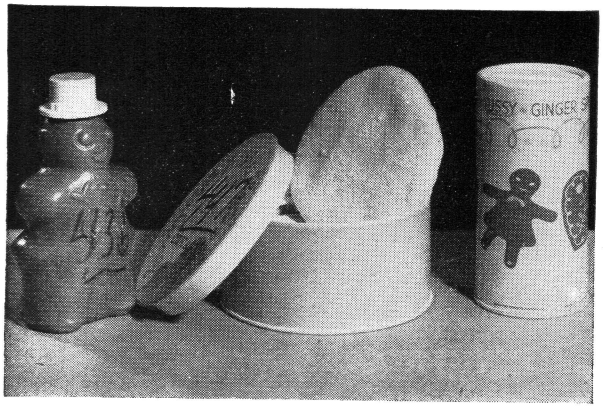
■ **SHALIMAR** Eau de Toilette de Guerlain (Guerlain, NYC). $9 for 3 fl. oz. ($3). Sweet bouquet. Strong; lasting. F.

■ **TAILSPIN** Eau de Toilette (Lucien Lelong, NYC). $4.50 for 4 fl. oz. ($1.13). Two samples had different odors—indeterminate floral bouquet and amber type with fruit note. Medium to weak; fairly lasting. Rather poor.

■ **APPLE BLOSSOM** Cologne (Elizabeth Post, NYC). 12¢ for 3 fl. oz. (4¢). Indeterminate floral. Weak; faded rapidly. P.

■ **CARA NOME** Cologne (Langlois, Boston). $1.50 for 4 fl. oz. (38¢). Indeterminate. Weak; faded rapidly. P.

■ **"BOND STREET"** Toilet Water (Yardley, NYC). $1.98 for 3 fl. oz. (66¢). Indeterminate floral. Weak; faded rapidly. P.

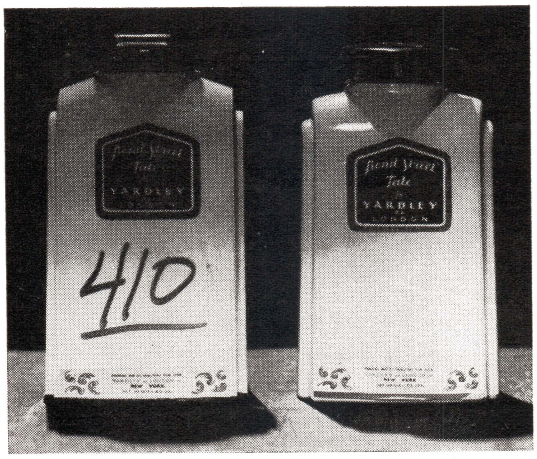


talcums

POWDERS FROM 2c TO $1.08 AN OUNCE WERE FOUND ACCEPTABLE

Whether it's sold as talcum, body, bath, or dusting powder, the product is pretty much the same mild cosmetic. It's a pleasant, usually scented, cool-feeling powder which can absorb a small amount of moisture and perspiration and which has the effect of a lubricant, making the skin feel slightly slippery. (Talcum powder has more slip and less opacity than face powder.) A number of firms making both talcum and dusting powders admit there isn't any significant difference between the two except, perhaps, in packaging and price. Some dusting powders are packaged with powder puffs, which frequently add to the cost.

Of the 57 varieties (the products of 47 manufacturers), rated by CU, ten cost less than 5c an ounce and two cost less than 2c, including the 20% Federal Cosmetic Tax. At the opposite end of the price scale were ten brands costing more than 35c an ounce—*Chanel No. 5* was $1.08—but in CU's tests many of the least costly rated as high as or higher than the expensive ones. In general, the qualitative differences were not great; even the lowest rating brand was a perfectly usable powder. Best Buys, the brands tested which gave the most in quality for the money, in the opinion of CU's consultant, all cost less than 10c an ounce. They included: *Irresistible* Fragrant Talc, *Bo-Kay* Orange Blossom Talcum, *Cashmere Bouquet* Talcum, *Djer-Kiss* Talcum, and *Macy's* Gardenia Scented.



The price of some powders depends on the packaging. Both Yardley Bond Street bottles, above, cost $1.20; the larger plastic one held 4¼ oz., the glass one 3½. Tussy Ginger Spice (left) cost $1.20 for 3 oz. in plastic gingerbread man; $1.20 for 5 oz. in box with puff; and 60c for 5 oz. in plain shaker-top container.

The major ingredient of powders of this type is talc, a chalky substance, the best quality of which comes from Italy and France. Other constituents of most powders are perfume essences and chemicals to make the powders adhere better, to increase absorbency, and sometimes to add a little color.

Many companies put out lines of cosmetics using the same perfume straight through the line, but the products don't always smell the same. Powders are particularly difficult to scent because their fine particles present so great a total surface area that some of the essential oils which carry the fragrance are rapidly oxidized or evaporated. The final odor of powder often is a surprise and not always a pleasant one. Don't rely on brand names and label statements to identify the fragrance of talcum powder for you; take a whiff yourself. You'll usually find that the resinous, balsamic, or amber odors (see toilet waters, page 486) hold up pretty well in powders, but that the florals are very fleeting and the aldehydes frequently break down into something other than fragrant.

CU's tests on powders were conducted by a consultant with many years of experience in the cosmetic field. He tested two samples of all brands except one for eight characteristics: spread, adherence, covering power, finish, absorbency, color, uniformity, and odor.

A weighed quantity of powder was rubbed over a small area of skin and the loose powder blown off. The better powders spread easily without any drag or gritty, sandy feeling. A uniform but barely visible film should be left on the skin; too much whiteness gives a chalky, "clown effect." The powder should not show any tracks when a camel's hair brush is passed lightly over the skin. The finish should be velvety, not sticky or harsh. A droplet of water placed on the powdered skin should be absorbed a little but the drop shouldn't become cloudy and the tint in the powder shouldn't bleed. The powder shouldn't track when the drop runs off.

Color and uniformity of the powders were judged by inspection. No matter what its shade, a powder should be clear and bright, not grayish or muddy. It should have no coarse particles, grit, lumps or glistening grains.

In the tests for odor, the dry powders were sniffed before and after overnight exposure to air to detect any unpleasant changes. Such changes were rare because by the time a powder is sold at retail, the essences have usually had plenty of chance to oxidize or evaporate. The powders were also mixed with water and the mixtures were smelled after standing for some time. Finally, the consultant vigorously rubbed small samples of the powders into his palms. The water test determines the resistance of a scent to moisture, and the rubbing test sometimes brings out unpleasant transformations in odor, particularly in powders scented with low-grade rose-type perfumes.

Scent is probably the deciding factor in most women's choice of a powder, but CU's cosmetic consultant believes that most women fail to realize how short a time the scent lasts after the powder has been applied. Powders are just not perfumes and can't successfully be used as such.

For ratings see next page

RATINGS OF TALCUM POWDERS: 57 powders are rated in order of estimated overall quality (see story). Differences between adjacent brands were very small and even the lowest rated brands were usable. The Best Buys are those brands which, in CU's opinion, gave the most in quality for the money. Prices include the 20% Federal cosmetic tax; cost per ounce is given by the figures in parentheses. All powders came in shaker-top containers unless otherwise noted.

BEST BUYS

■■ **IRRESISTIBLE** Fragrant Talc (Irresistible Inc., NYC). 12¢ for 5 oz. can (2.4¢).

■■ **BO-KAY** Orange Blossom Talcum (Bo-Kay Perfume Co., NYC). 12¢ for 3 oz. can. (4¢).

■■ **CASHMERE BOUQUET** Talcum (Colgate-Palmolive-Peet Co., Jersey City). 47¢ for 6½ oz. can (7.2¢); 30¢ for 4 oz. can (7.5¢).

■■ **DJER-KISS** Talcum (Kerkoff, NYC). 47¢ for 6½ oz. can (7.2¢); 30¢ for 3¼ oz. can (9.2¢).

■■ **MACY'S** Gardenia Scented Talcum (R. H. Macy & Co., NYC). 47¢ for 1 lb. paper and metal container (2.9¢).

ACCEPTABLE

■ **DANA TABU** Body Sachet (Dana Perfumes, NYC). $1.80 for 4¼ oz. box with puff (42.4¢). Tinted.

■ **COTY L'ORIGAN** Talc (Coty, NYC). 90¢ for 3.7 oz. can (24.3¢).

■■ **CASHMERE BOUQUET** (see Best Buys).

■■ **DJER-KISS** (see Best Buys).

■■ **BO-KAY** (see Best Buys).

■■ **IRRESISTIBLE** (see Best Buys).

■ **SHULTON EARLY AMERICAN OLD SPICE** Talcum (Shulton, Inc., Clifton, N. J.). $1.20 for 10 oz. paper and plastic container (12¢); 60¢ for 4¾ oz. (12.6¢).

■ **CHANEL NO. 5** Toilet Powder for After the Bath (Chanel, Inc., NYC). $4.30 for 4 oz. box with puff ($1.08).

■ **CHERAMY CAPPI** Talc (Cheramy, NYC). 47¢ for 5 oz. can (9.4¢); 90¢ for 4 2/5 oz. glass container (20.5¢).

■ **HARRIET HUBBARD AYER GOLDEN CHANCE** Talcum (Harriet Hubbard Ayer, NYC). 90¢ for 5 oz. paper and metal container (18¢).

■ **JOHNSON'S** Baby Powder (Johnson & Johnson, New Brunswick, N. J.). 59¢ for 9 oz. (6.6¢); 30¢ for 4 oz. can (7.5¢).

■ **LANGLOIS LAVENDER** Talc (Langlois, Boston). 42¢ for 3⅛ oz. can (13.4¢).

■ **LARKIN** Talcum, Cat. No. 302 (Larkin Co., Buffalo, N. Y.). 23¢ plus postage for 3 oz. can (7.7¢).

■■ **MACY'S** (see Best Buys).

■ **CHARBERT BREATHLESS** Dusting (Charbert, NYC). $1.80 for 5 oz. box with puff (36¢).

■ **MENNEN** Baby Powder (Mennen Co., Newark, N. J.). 59¢ for 9 oz. can (6.6¢); 30¢ for 4 oz. (7.5¢).

■ **RICHARD HUDNUT DU BARRY** Body (Richard Hudnut, NYC). $1.80 for 7 oz. plastic container with puff (25.7¢); $1.20 for 7 oz. refill with puff (17.1¢).

■ **RICHARD HUDNUT THREE FLOWERS** Dusting (Richard Hudnut). $1.20 for 7 oz. paper container with puff (17.1¢).

■ **CHERAMY APRIL SHOWERS** Talc (Cheramy). 47¢ for 5 oz. can (9.4¢); 90¢ for 4 2/5 oz. glass container (20.5¢).

■ **ELIZABETH ARDEN BLUE GRASS** Dusting (Elizabeth Arden, NYC). $2.40 for 4¼ oz. paper container with puff (56.5¢).

■ **HELENA RUBINSTEIN HEAVEN-SENT** Body (Helena Rubinstein, Inc., NYC). 90¢ for 4 oz. paper container (22.5¢); $1.80 for 6 oz. paper and metal container with puff (30¢). Tinted.

■ **LANDER LILACS AND ROSES** Blended Talc (Lander, NYC). 33¢ for 1 lb. can (2.1¢); 12¢ for 5 oz. can (2.4¢).

■ **SQUIBB UNSCENTED** Talcum (E. R. Squibb & Sons, NYC). 33¢ for 4 oz. can (8.3¢).

■ **AMORAY APPLE BLOSSOM** Talc (Carrel, Ltd., Chicago). 35¢ for 3 oz. can (11.7¢).

■ **AVON COTILLION** Talcum (Avon Prod., Inc., NYC). $1.43 for 14½ oz. can (9.9¢); 47¢ for 2¾ oz. can (17.1¢).

■ **CARREL ALL PURPOSE** Talc (Carrel, Ltd.). 59¢ for 9 oz. can (6.6¢).

■ **COTY L'AIMANT** Talc (Coty, NYC). 90¢ for 3.7 oz. can (24.3¢).

■ **BOURJOIS EVENING IN PARIS** Talcum (Bourjois, NYC). 78¢ for 3¼ oz. glass container (24¢).

■ **HOUBIGANT CHANTILLY** Body (Houbigant, NYC). 98¢ for 4 oz. can (24.5¢).

■ **LUCIEN LELONG INDISCRETE** Talc (Lucien Lelong, NYC). $1.30 for 3 oz. glass container (43.3¢). Tinted.

■ **RICHARD HUDNUT GEMEY** Talcum (Richard Hudnut). 72¢ for 4 oz. can (18.0¢).

■ **SPOONER APPLE BLOSSOM** Talcum (Spooner, Inc., NYC). 30¢ for 1 lb. paper and metal container (1.9¢).

■ **VARVA FOLLOW ME (SUIVEZ MOI)** Talc (Varva, NYC). 62¢ for 3 oz. paper container (20.7¢).

■ **VI-JON APPLE BLOSSOM** Soft-Test Talc (Vi-Jon Lab., St. Louis). 12¢ for 5 oz. can (2.4¢).

■ **CARA NOME** Talcum (Langlois). 72¢ for 3½ oz. can (20.6¢).

■ **GIMBELS GARDENIA** Talc (Gimbel Bros., NYC). 28¢ for 12 oz. paper and metal container (2.3¢).

■ **MARY SCOTT ROWLAND** Talcum (Mary Scott Rowland, Ltd., NYC). 47¢ for 4 oz. can (11.8¢).

■ **CHARLES OF THE RITZ SPRING RAIN** Dusting (Charles of the Ritz, NYC). $1.80 for 7 oz. paper container with puff (25.7¢).

■ **DAGGETT & RAMSDELL MOUNTAIN HEATHER** Talc (Daggett & Ramsdell, NYC). 60¢ for 4 oz. paper container (15¢). Tinted.

■ **ELIZABETH POST SWEET PEA BOUQUET** Talcum (Eliz. Post, NYC). 12¢ for 3½ oz. can (3.4¢). (12.6¢).

■ **FABERGÉ WOODHUE** Bath (Fabergé, Inc., NYC). $2.40 for 6 oz. paper container with puff (40¢).

■ **PARK & TILFORD NO. 3 PERFUME** Talcum (Park & Tilford, NYC). 12¢ for 1¾ oz. can (6.9¢).

■ **SHULTON EARLY AMERICAN FRIENDSHIP'S GARDEN** Talcum (Shulton, Inc.). $1.20 for 10 oz. paper and plastic container (12¢); 60¢ for 4¾ oz. (12.6¢).

■ **SQUIBB CARNATION** Talcum (E. R. Squibb & Sons). 33¢ for 4 oz. can (8.3¢).

■ **YARDLEY BOND STREET** Talc (Yardley, NYC). $1.20 for 4¼ oz. plastic container (28.2¢); $1.20 for 3½ oz. glass container (34.3¢).

■ **YARDLEY OLD ENGLISH LAVENDER** Talc (Yardley). $1.20 for 8 oz. can (15¢); 60¢ for 3 oz. (20¢).

■ **ALMAY** Talcum Perfumed (Almay, Inc., NYC). 90¢ for 4½ oz. paper container (20¢). Tinted.

■ **GOODMAN-COLLINS** Floral Fragrance Dusting (Goodman-Collins Co., Brooklyn). 30¢ for 1 lb. paper and metal container (1.9¢). Only 1 sample tested.

■ **LENTHÉRIC MIRACLE** Talc (Lenthéric, NYC). $1.50 for 4 oz. glass container (37.5¢); 78¢ for 2 oz. paper container (39¢).

■ **SEARS HONEYSUCKLE** Antiseptic Baby Powder, Cat. No. 8 E 2177E (Sears-Roebuck). 89¢ plus postage for two 10 oz. cans (4.5¢).

■ **TUSSY GINGER SPICE** Dusting (Lehn & Fink Prod. Corp., Bloomfield, N. J.). 60¢ for 5 oz. paper and metal shaker (12¢); $1.20 for 5 oz. container with puff (24¢); $1.20 for 3 oz. plastic gingerbread man (40¢). Tinted.

■ **MAVIS** Talcum (Vivaudou, NYC). 49¢ for 6½ oz. can (7.5¢).

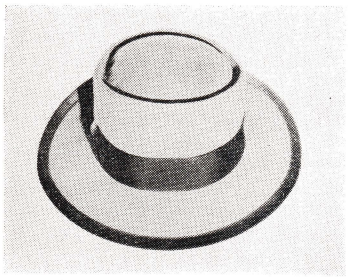
■ **PRINCE MATCHABELLI DUCHESS OF YORK** Talcum (Prince Matchabelli, Inc., NYC). $1.50 for 3¾ oz. glass container (40¢).

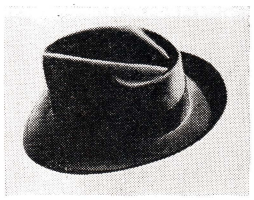
■ **ALEXANDRA DE MARKOFF FRAGRANT FERN** Talcumizer (Alexandra de Markoff Sales Corp., NYC). $1.80 for 7 oz. "squeeze" bottle (25.7¢).

■ **LENTHÉRIC** Tweed Talc (Lenthéric) $1.50 for 4 oz. glass container (37.5¢); 78¢ for 2 oz. paper container (39¢).

■ **BEAUTY COUNSELOR LILAC** Talcum (Beauty Counselors, Inc., Grosse Pointe, Mich.). $1.07 for 4 oz. metal, paper, and plastic container (26.8¢).

■ **DOROTHY GRAY NOSEGAY** Dusting (Dorothy Gray, Ltd., NYC). $2.40 for 5½ oz. paper container with plastic cover and puff (43.6¢).





MEN'S HATS

31 costing $15 or less were tested; more than half rated well

The men's hat industry in the United States takes a critical view of American men. Too many of them, say the hatters, have been going without hats, and even the hat wearers usually haven't had big enough hat wardrobes. Among these businessmen complaints about sales are practically as common as conversation. In 1900 they turned out 36,000,000 fur felt hats for about 25,000,000 potential customers. By 1946 falling demand had resulted in an output of 22,000,000 for a potential market of more than twice that number. Hat companies during the intervening years were going bankrupt by the dozen. One hat trade publication reported recently that almost 99% of the firms in the industry at the turn of the century had since gone out of business.

The industry's complaint about the size of most men's hat wardrobes reflects the fact that today the same felt hat is considered perfectly acceptable for business, strolls in the country, dates, church-going, and Easter parades. Even a man shooting down a ski slope in a utilitarian fedora is unlikely to arouse much comment. This situation, to the hatters, shows a lack of appreciation of the finer points of dress. To be well dressed, they insist, a man should have different styles of hats for different occasions and for different clothes.

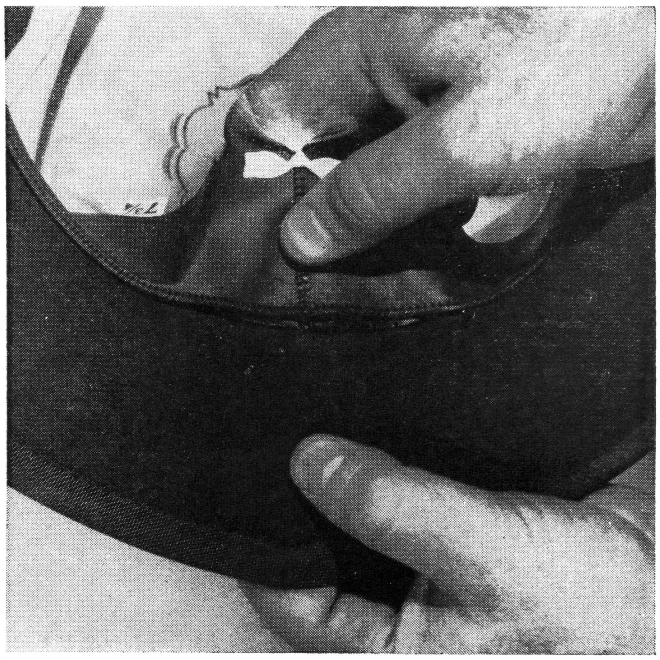
The Hat Research Foundation has been studying the population's hat habits and attitudes and preparing campaigns to promote hats and hattedness. Two appeals frequently used have been the successful look and sex appeal. It is a moot point whether hats have anything to do with either. At first the hatters themselves took their campaigns lightly—at least, lightly enough to make their ads funny. Recently, however, they have been dead serious. The seriousness may be justified when one considers the weight of opinion the industry still has to overcome. One survey has shown that a lot of women don't care much whether men wear hats or not; only 31% of the unmarried women interviewed said they'd insist on their escorts' being hatted, and only a tiny 9% of all women questioned said they thought men should wear hats for every outdoor occasion.

For its tests of the new lines of fall and winter hats, CU purchased two samples of each of 31 fur felt hats, ranging in price from $3.95 to $15. You can pay much more for a felt if you want, but you can get an excellent one for less than $15. Wool felt hats were not covered in the tests because, although generally cheaper than fur felts, they do not as a rule hold their shape or wear nearly so well. Ten national brands were included, with an average of three different price lines for each. Apparently competing brands of hats are sometimes made by the same company.

All of CU's tests on hats were designed to measure some aspect of durability. Samples of felt were given flex-abrasion tests as an indication of how much handling and wear the hats would take without failure. Bursting strength tests, which measure the resistance of the felt to failures caused by rupture, also indicate the quality of felting—a factor in shape-holding ability; these tests were made on both the crown and the brim of each sample. To see how the hats would stand up against rain, CU's technicians performed intermittent wetting tests which showed that all of the hats tested were about equal on this count.

The construction of the hats was examined with particular emphasis on the protection provided against perspiration and hair oils. All hats came lined, and in many cases the lining had a waterproof section at the pate to protect the felt from the hair and whatever might be on it. Many stores informed CU that they would install such a lining at no extra cost.

Sweatbands can be sewn in hats in several different ways. "Whipped-in" bands are sewn directly to the felt, and the threads may act as wicks carrying perspiration into the body of the hat. "Reeded" bands are sewn to a piece of waterproof material, which in turn is sewn sep-



This type of construction—with sweat band sewn to a separate piece of fabric which in turn is stitched to the hat—affords good protection against perspiration. Threads going directly from leather to felt carry sweat into hat body

arately to the hat body (see picture above). An improvement in "reeded" construction (also available) has an additional strip of oil silk or other waterproof material between the sweatband and the hat. This type is undoubtedly preferable for persons who perspire freely, and can be had at no extra cost in most cases.

The color fastness of the hats was also tested. The samples purchased, half of them gray and half brown, were exposed to light which was the equivalent of bright sunlight and checked for fading; they were also dipped repeatedly in water and cleaning fluid and checked for color changes.

The final ratings, running from Excellent to Poor, were based on the average total scores of the two samples of each hat, with durability of felt counting 65%, construction 25%, and color fastness 10%. (Although there were differences between brands, no hat tested faded or spotted seriously enough to be unwearable.) Because every hat is made from an individual cone of fur which is felted as a separate unit, there is bound to be some variation in the final product; additional samples were tested on six of the brands because of the variability of the original samples.

This year's ratings, which are not directly comparable to CU's 1947 ratings because of some differences in the tests, again showed that there is a fair correlation in hats between price and durability (CU did not test for such factors as texture, subtlety of shade, and details of style and fit, which may, of course, be as important as durability, or even more so, to many buyers; these are largely matters of personal preference). The top nine hats in this year's ratings cost $10 apiece or more and five of the bottom six cost $5 or less; the sixth cost $6. There were exceptions to the relation between price and durability (for example, *Stetson*'s $15 hat ranked below *Stetson*'s $12.50 hat, which ranked below *Stetson*'s $10 hat). The only inexpensive hat rated Good was the only Best Buy, *Sears* Pilgrim Red Label at $4.88 plus postage.

RATINGS OF 31 MEN'S HATS:

Listed in order of overall quality as determined by CU's tests for felt durability, construction, and color fastness (see story). Final scores were averages of results from two samples of each hat, one brown and one gray. Ratings reflect only durability and construction factors, not points of styling. Differences between adjacent brands in most instances were not large.

BEST BUY

■ ■ **SEARS** Pilgrim Red Label, Cat. No. 33 E 4548 (brown), 33 E 4550 (gray) (Sears-Roebuck). $4.88 plus postage. Overall rating, Good. Felt durability, Fair (the felt was somewhat stiff). Construction, Excellent. Color fastness, Good.

ACCEPTABLE

■ **DOBBS** (Dobbs Hats, Div. of Hat Corp. of America, S. Norwalk, Conn.). $12.50. Overall rating, felt durability, construction, and color fastness, Excellent.

■ **MALLORY** XV (Mallory Hats, Danbury, Conn. Div. of John B. Stetson Co., Philadelphia). $15. Overall rating, felt durability, construction, and color fastness, Excellent.

■ **KNOX** Premier (Knox Hats, Div. of Hat Corp. of America). $10. Overall rating, Good. Felt durability, Good. Construction, Excellent. Color fastness, Excellent.

■ **DOBBS** (Dobbs Hats, Div. of Hat Corp. of America). $10. Overall rating, Good. Felt durability, Good. Construction, Excellent. Color fastness, Good.

■ **DOBBS** Fifteen (Dobbs Hats, Div. of Hat Corp. of America). $15. Overall rating, Good. Felt durability, Good. Construction, Excellent. Color fastness, Good.

■ **MALLORY** Ten Premier Quality (Mallory Hats, Div. of John B. Stetson Co.). $10. Overall rating, Good. Felt durability, Good. Construction, Excellent. Color fastness, Excellent.

■ **KNOX** Fifteen (Knox Hats, Div. of Hat Corp. of America). $15. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Excellent.

■ **ROYAL STETSON** (John B. Stetson Co., Philadelphia). $10. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Excellent.

■ **DUNLAP** Superior (Hat Corp. of America). $10. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **ADAM** Executive (Adam Hat Stores, Inc., NYC). $7.50. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ ■ **SEARS** Pilgrim Red Label (see Best Buy). $4.88 plus postage.

■ **LEE** Black Label (Frank H. Lee Co., NYC). $7.50. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **ADAM** Long De Luxe (Adam Hat Stores, Inc.). $10. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **MALLORY** Aristocrat Quality (Mallory Hat Co., Div. of John B. Stetson Co., Philadelphia). $7.50. Overall rating, Good. Felt durability, Fair. Construction, Fair. Color fastness, Excellent.

■ **YOUNG'S** Fawnfelt (Young's Hat Stores, NYC). $7.50. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **LEE** Silver Label (Frank H. Lee Co.). $12.50. Overall rating, Good. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **WARDS** Brent 3-Star, The Airlite, Cat. No. 35 A 5366 T (Montgomery Ward). $6.45 plus postage. Overall rating, Fair. Felt durability, Poor. Construction, Excellent. Color fastness, Good.

■ **YOUNG'S** Beaufelt (Young's Hat Stores). $10.50. Overall rating, Fair. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **ROYAL DE LUXE STETSON** (John B. Stetson Co.). $12.50. Overall rating, Fair. Felt durability, Poor. Construction, Excellent. Color fastness, Excellent.

■ **LEE** Blue Label (Frank H. Lee Co.). $10. Overall rating, Fair. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **DUNLAP** Supreme (Hat Corp. of America). $12.50. Overall rating, Fair. Felt durability, Fair. Construction, Excellent. Color fastness, Good.

■ **SEARS** Pilgrim Blue Label Cat. No. 33 E 4539 (brown) and 33 E 4319 (gray) (Sears-Roebuck). $6.88 plus postage. Overall rating, Fair. Felt durability, Poor. Construction, Excellent. Color fastness, Good.

■ **STETSON** Fifteen: Imperial Stetson (John B. Stetson Co.). $15. Overall rating, Fair. Felt durability, Poor. Construction, Excellent. Color fastness, Excellent.

■ **WARDS** Brent 4 Star, The American, Cat. No. 35 A 5414 T (Montgomery Ward). $8.45 plus postage. Overall rating, Fair. Felt durability, Poor. Construction, Excellent. Color fastness, Good.

■ **WARDS** Brent 3-Star, The American, Cat. No. 35 A 5368 T (Montgomery Ward). $6.45 plus postage. Overall rating, Fair. Felt durability, Poor. Construction, Excellent. Color fastness, Good.

■ **SEARS** Pilgrim Green Label, Cat. No. 33 E 4337 (brown) and 33 E 4335 (gray) (Sears-Roebuck). $3.95 plus postage. Overall rating, Fair. Felt durability, Poor. Construction, Excellent. Color fastness, Good.

■ **YOUNG'S** Melofelt (Young's Hat Stores). $5. Overall rating, Fair. Felt durability, Fair. Construction, Fair. Color fastness, Excellent.

■ **ADAMAJESTIC** (Adam Hat Stores, Inc.). $6. Overall rating, Fair. Felt durability, Poor. Construction, Fair. Color fastness, Excellent.

■ **WARDS** Brent 1-Star, The Adventurer, Cat. No. 35 A 5321 T (Montgomery Ward). $4.75 plus postage. Overall rating, Poor. Felt durability, Poor. Construction, Poor. Color fastness, Good.

■ **ADAMROYAL** (Adam Hat Stores, Inc.). $5. Overall rating, Poor. Felt durability, Poor. Construction, Poor. Color fastness, Good.

■ **WARDS** Brent 1-Star, The Airlite, Cat. No. 35 A 5320 T (Montgomery Ward). $4.75 plus postage. Overall rating, Poor. Felt durability, Poor. Construction, Poor. Color fastness, Good.

TV color

The Federal Communications Commission has announced its approval of the CBS system of color television, and CBS has announced that it will begin some broadcasting in color soon. CU is all for both developments. As heretofore noted (CONSUMER REPORTS, October 1949, April and October 1950), CU considers color TV a notable improvement over black and white, and believes the CBS system is a practical and economical way to achieve it.

The television industry generally has taken the opposite position. Its proposal, certainly in effect and perhaps also by design, is to sell an additional 30,000,000 or 40,000,000 black-and-white receivers, and then to introduce a color system which will require everybody to buy new sets. It is obviously in the consumer interest to make the changeover now, when only 7,000,000 or 8,000,000 sets are in use—and to change over to a system which will permit conversion of existing sets to color at a reasonable cost.

RCA and others have already challenged the FCC decision in the courts. It is unlikely that these suits will be successful in the end, but they may hold up color TV for months or even a year or two. A consumer who buys a television set today is in effect gambling on the successful outcome of these suits. CU believes that the many consumers who reportedly have put off buying new TV sets are wise under the circumstances.

If you already own a set, or if you buy one today, it will not, of course, become useless when CBS "colorcasts" begin. There will still be a full quota of black-and-white programs to which you can tune—though the proportion of colorcasts should increase gradually.

Here is the situation as it looked when this issue went to press.

COLOR SETS. As yet no manufacturer has announced CBS-type color receivers. This is to be expected. Until new receivers are actually on sale in the stores no manufacturer wants the sale of his present stock of black-and-white sets to stop.

"SLAVE" ATTACHMENTS. At least two manufacturers—*Tele-Tone* and *Muntz*—have each announced a "slave" device, a cabinet containing another picture tube, color wheel and the necessary additional circuits. Such a "slave" can be attached to an existing set to receive CBS color pictures in full color. Black-and-white pictures will be received on the original set. Both companies have promised initial deliveries by the first of the year. Prices have not been announced.

ADAPTERS will enable you to see CBS-type colorcasts in black and white. Or you can have your set internally adapted for this purpose. One New York concern has offered internal adaptation for $25 (dealers' price).

CONVERTERS. Once a set has been adapted, full color reception can be achieved by means of a "converter" placed in front of the set. One company, *Celomat*, has announced converters at $60 for 12-inch pictures (the maximum size at present). If you have a 16-inch or 19-inch set, it should be possible to have your set adjusted to deliver a smaller CBS color picture without interfering with its ability to deliver black-and-white broadcasts full size.

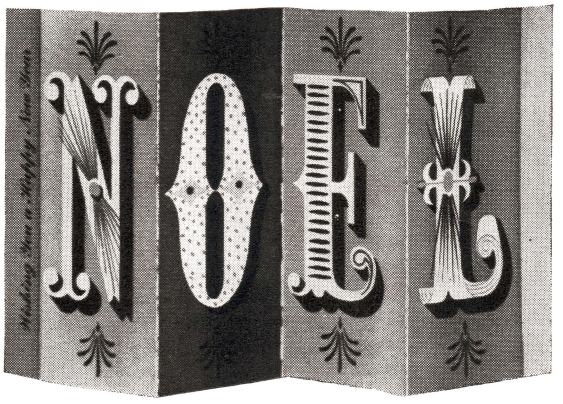
RACKETS. There are already hints that some manufacturers will claim that their sets are "ready for color" because room has been left in the cabinet for an adapter or because a jack has been added into which an adapter can be plugged. Don't confuse such sets with sets which are really capable of receiving both CBS color and standard programs in black and white.

FUTURE DEVELOPMENTS. CBS is said to be readying a "color drum" which will make possible full color reception without limiting picture size. Further in the future is the possibility of an effective three-color tube with "built-in" color. RCA and other companies are at work on such tubes, which could be used in the CBS system as well as in any other.

Under the circumstances prevailing, tests on TV sets in progress in CU's laboratory have been stopped. CU plans to test and report on color television sets and attachments as soon as they can be bought. Meanwhile, CU suggests that prospective set purchasers wait a little longer before buying a new set. While it will be possible to adapt and convert sets purchased today, buying a set later with color reception built in is likely to prove cheaper and more convenient.

Traditional religious cards, put out by a number of firms, are available from 5¢ up. This reproduction of an Italian madonna and child is from P.L.B.

Chinese wood block is from New York's Metropolitan Museum; Steinberg's Santa (right) from Museum of Modern Art. Many museums sell cards for 5¢ and up



Cards of the sophisticated type run from 5¢ to 50¢. This Irene Dash example is slick paper in shocking pink, green, and turquoise

CHRISTMAS CARDS

With Christmas come Christmas cards—millions of them—in the stores from mid-October on. The problems for the buyer and sender boil down to (a) his taste, (b) his pocketbook, (c) the length of his list. Some order printed cards by the hundreds, others make their own with colored paper and crayon. Some brood for hours over individual cards, gearing selections to their friends' tastes; others take just as long to fit the selections to their own taste and personality.

Fortunately, there are cards around that should jibe with most tastes, whims, or whimsies.

There are religious cards, formal greeting cards, comic cards, candy cards, cards that talk, cards with photos of winter scenes, cards with reproductions of old masters, modern old masters, and contemporary artists, cards addressed to a specific person, and cards which double as gift folders for a Christmas check or bill. Some cards are as chaste as a calling card, and others embellished with "ribbons, foil, and glitter" might double as Valentines, and probably do on occasion. There are cards which emphasize sentiment, and others which emphasize sophistication and assiduously avoid the slightest suggestion of traditional Christmas motives. Some cards, such as one depicting a hangman's noose, seem to have wandered from the Christmas spirit.

The large manufacturers (Hallmark, for example) cover themselves in almost every category, and their cards are available in all kinds of stores. Their price range is equally great—they offer cards at 5c to $1.

If you are an advocate of the send-to-everyone school of thought, don't overlook the possibilities of inexpensive boxed cards; some are available for as little as 50 for 59c. One manufacturer in this group uses the brand name *Pollyanna;* Sears-Roebuck also has a selection. Most cards in this category are not outstanding for individuality—they lean heavily on the poinsettia, the candle, the holly, and the jolly Santa; color range is limited, with emphasis on red, green, yellow, and white; and paper is no more than adequate. Printed sentiments in this group, however, are dignified and restrained, and if quantity at reasonable cost is what you're looking for, this is one solution.

At the other extreme are cards which have been influenced by advertising art, some of them with handsome results. The main plus marks in their favor are good quality paper and strong clear color. In many instances effective and dramatic typography is substituted for traditional Christmas motifs; these cards convey the Christmas spirit through gaiety and brilliance. Designers & Illustrators, Fravessi-Lamont, and Irene Dash all manufacture cards that are handsome, sophisticated, and untraditional in a sleek way. They are usually available at specialty shops, jewelers, stationers, and bookstores, at a price range of roughly 5c to 50c apiece. (Some cards can be bought only in boxes of 25 or more, and since the majority in this group average about 15c apiece, the package deal can run into money.) The same stores usually carry cards for imprinting, including the very, very formal type which are little more than a stiff oblong of pasteboard

Hallmark puts out cards for 5¢ to $1 and for practically every taste. This textured surface teddy bear for 25¢ is supposed to be sent to a one-year-old

Winter snow scenes are an old standby. P.L.B. has good uncolored photographic ones for 5¢ and 10¢ and also Currier & Ives type prints

Volland Twirl-Arounds are paper mobiles mailed flat (15¢ to 35¢). Barker also makes novelty cards—a flying Santa, money trees, and talking cards

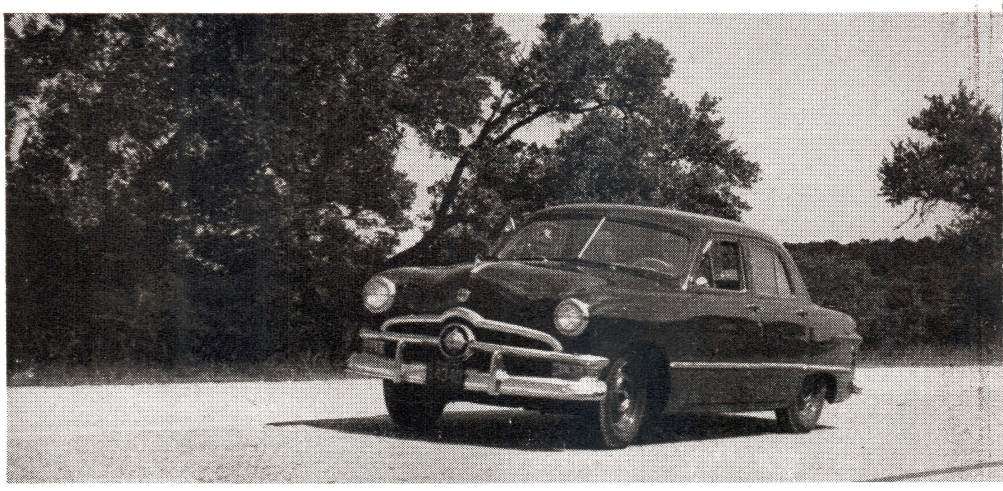
with the words "Season's Greetings" inscribed. Your name is added to order.

In the past few years Christmas cards, like china and fabrics, have joined hands with the fine arts. There are more and more cards designed by living artists, or reproducing the works of old masters. P.L.B. has a fine selection of religious cards reproducing the work of 15th, 16th, and 17th Century Italian painters; the cards are small, the illustration is sepia-toned, the greeting is formal, and the cost is 5c. Hallmark has a large group of "Gallery Artists," including Winston Churchill, Grandma Moses, and Norman Rockwell; the cards are large sized, in good color on heavy paper. The American Artists Group also has artist-designed cards on good paper, including etchings and woodcuts as well as color reproductions. In the fine arts field—and among the best looking cards available—are those put out by the Metropolitan Museum of Art and the Museum of Modern Art in New York, along with other museums throughout the country, including the Pierpont Morgan Library, New York; Museum of Fine Arts, Boston; Philadelphia Museum of Art; Newark Museum; Brooklyn Museum; City Art Museum of St. Louis; Los Angeles County Museum; Chicago Art Institute; Baltimore Museum of Art, and the Walters Art Gallery of Baltimore. The range of subject matter is diverse; paper, color, layout, and typography are usually first rate, and the price range is roughly 5c to 25c. The Metropolitan dispenses with printed greetings in some of its cards, encouraging a personal message.

Card with picture by Gladys Rockmore Davis is one of many by contemporary artists put out by the American Artists Group. They are sold in boxes of 25 at $2.50 to $6.25

Pictureless cards for printing with sender's name come in many varieties. This one by Seco is $4.25 for 25, $11 for 100, including the printing costs

RATINGS OF EIGHT BRANDS, BASED ON ACTUAL ROAD TESTS



These four cars shuttled back and forth over a 200-mile route due north

AUTO TIRES

the tire market

Since the tires tested by CU were made, two major changes have occurred.

First, some brands which used rayon for tire cord during the first half of 1950 have now converted to cotton. Other companies are using rayon and cotton interchangeably, depending on the availability of rayon. CU's tests confirmed the general opinion that rayon produces a stronger tire carcass. Shortage of rayon from the Korean crisis caused the change.

Second, the percentage of synthetic rubber in tires is being gradually increased, and the percentage of natural rubber decreased. At the beginning of the year the industry-wide ratio was about 30% synthetic, 70% natural. Both types then sold for about 18½c a pound. Since Korea, the price of synthetic rubber has remained around 18½c by government decision, while natural rubber reached an August high of 63c. As a result, the industry increased the synthetic proportion to 40%, and plans to increase it gradually to 60% as additional synthetic rubber becomes available. The proportion of synthetic rubber in passenger-car tires is generally even higher than the general industry proportion. What effect the change will have on tire characteristics is not known at this time.

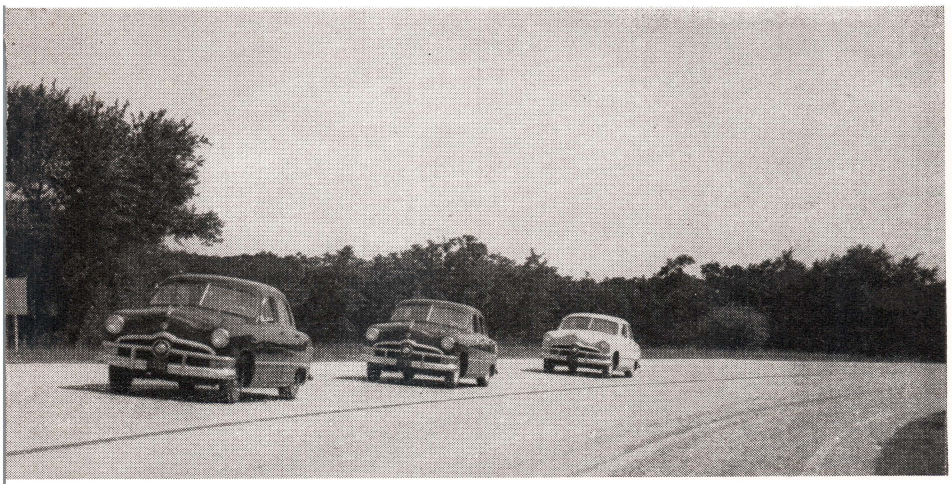
In general, tests of ordinary consumer products fall into one of two classes—tests which give precise results but under laboratory conditions; and actual use tests, in which results are dependent on individual judgment. CU's tire tests just completed constitute a noteworthy example of how the two types of tests can be combined, and of how actual use tests can be run under conditions sufficiently well controlled to yield precise quantitative results.

Tests were run on size 6.00x16 tires of eight leading brands. All tires tested were standard, four-ply, blackwall, "first line" tires in the $19 to $24 price range. Two samples of each brand were tested, and a third sample was purchased, examined, and held for use in the event of tire failure during road tests. Care was taken to select for actual testing pairs of tires with code numbers sufficiently different to suggest that they came from different tire batches—in order to check at least roughly on variability from batch to batch within each brand. The tubes used were of synthetic (butyl) rubber; these leak less air than natural rubber tubes and are recommended.

The road tests

As noted in CONSUMER REPORTS for September, four new *Fords* were purchased for use in CU's road tests. They were loaded in such a way that with each driver in his seat and the gasoline tank half full, each tire carried 1100 pounds—a 20% overload. The cars were driven two round trips daily over a test course 200 miles long, due north from San Antonio, Texas, for a total of 800 miles a day.

Many precautions were taken to minimize differences in the amount of wear to which the 16 tires were subjected. The four *Fords* used were identical except for color; their brakes were equalized and each wheel and tire balanced, before the tests began. The four cars traveled together as a group, never separated by more than half a mile. When one car stopped, all stopped. The drivers were all experienced in prior road-test work, and had explicit instructions concerning the appropriate speed for each portion of the route, for turning corners, rounding curves, etc. To check on adherence to these instructions, the first and last cars of the cavalcade were equipped with recording tachometers, which made a permanent record of speed of travel,



)m San Antonio, Texas, for a total of 12,800 miles in CU's tire tests

After 12,800 miles of road wear, each tire was abraded by machine until the first tread groove disappeared. Considerable mileage is possible beyond this point, of course —especially if the tire is worth retreading

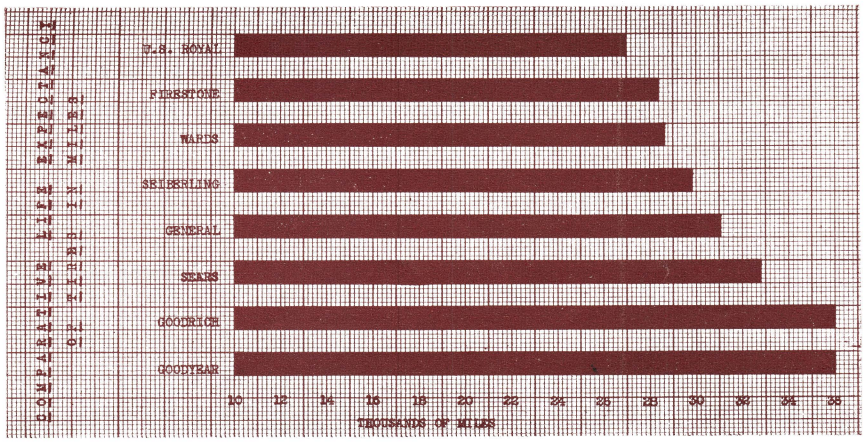


Chart at left indicates comparative life expectancy of tire treads on the eight 6.00x16 tires tested, as estimated from CU's road wear and abrasion tests

and of the time and duration of each of the stops made.

At the end of each 800-mile run, the wheels were taken off, washed, allowed to dry overnight, weighed, then checked for balance and replaced in a different wheel position—so that each tire was run 800 miles in each of the 16 wheel positions, for a total of 12,800 miles.

The tires were initially inflated to a pressure equivalent to 28 pounds at 68° F (with due allowance for higher and lower temperatures), and adjusted to that pressure again before each weighing.

In general, the conditions of the test (overloaded tires, higher-than-average driving speeds, midsummer Texas temperatures, etc.) were of a type likely to result in relatively rapid tire wear.

Analysis of the test results indicated that conditions were in fact very well controlled. The average amount of wear shown by the 16 tires during successive periods was remarkably uniform. The only unusual data disclosed concerned relative tire wear in the different wheel positions (see chart, page 498).

While not immediately relevant to the tire test results, the gasoline and oil consumption for each car was recorded. The best of the four *Fords* ran 1500 miles per quart of oil, while the worst ran 1100 miles per quart. Gasoline consumption averaged about 16.4 miles per gallon. The two cars equipped with recording tachometers used somewhat more gasoline than the other two cars, probably because their drivers engaged in extra acceleration or braking at times in an effort to maintain uniform speed.

Tread wear

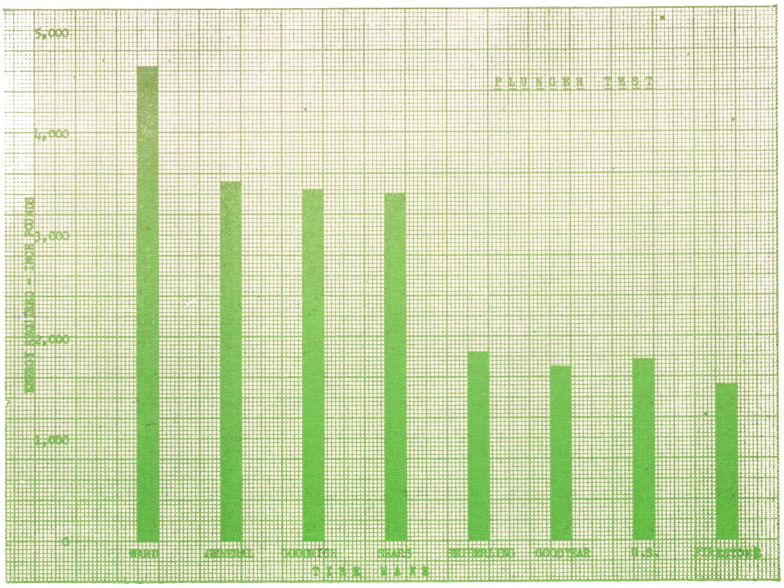
CU's tests were designed primarily to get comparative data on three basic characteristics of a good tire—tread wear, carcass strength, and resistance to "cut growth." Some data on a usually neglected factor known as "power loss" were also procured.

In tire tests run by others, tread wear has generally been gauged by measuring the loss of thickness of the tread. In 1944, however, experimenters at the National Bureau of Standards found that measurements of weight loss were preferable for test purposes. CU used the weight-loss method. A special scale was constructed which could give readings precise to within one gram (one part in 20,000). Each wheel was weighed at the end of each 800-mile run, for a total of 16 weight determinations per wheel.

Following the road wear tests, each tire was placed in a specially constructed abrading machine, and the rubber

AUTO TIRES continued

Chart at right shows relative strength of tire carcasses after 12,800 miles of road wear, as determined by plunger test



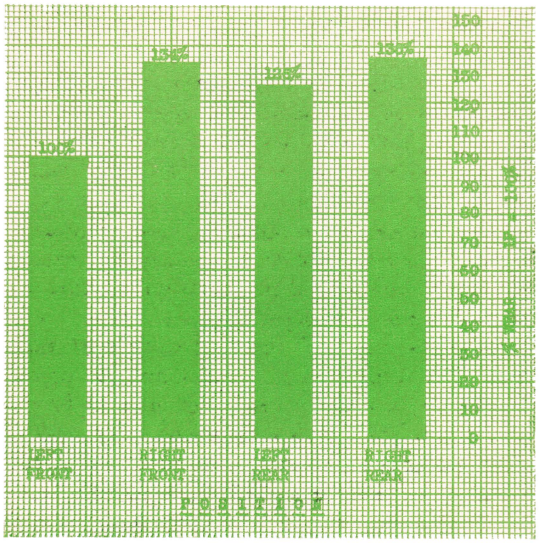
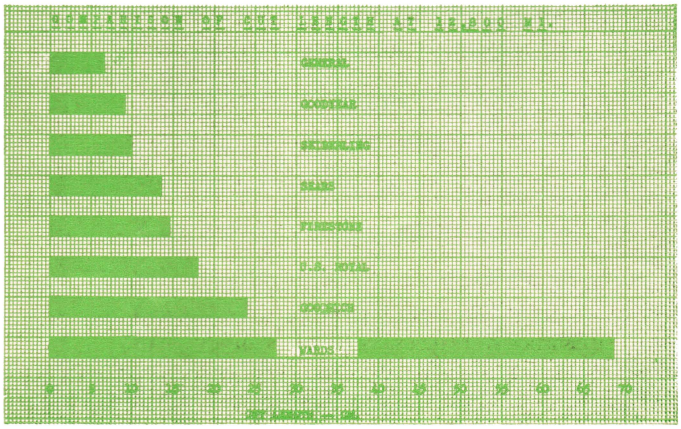


Chart above shows the effect of wheel position on tire wear. The right front tires tended to wear more than the left front tires, probably because of rougher surfaces near road margins

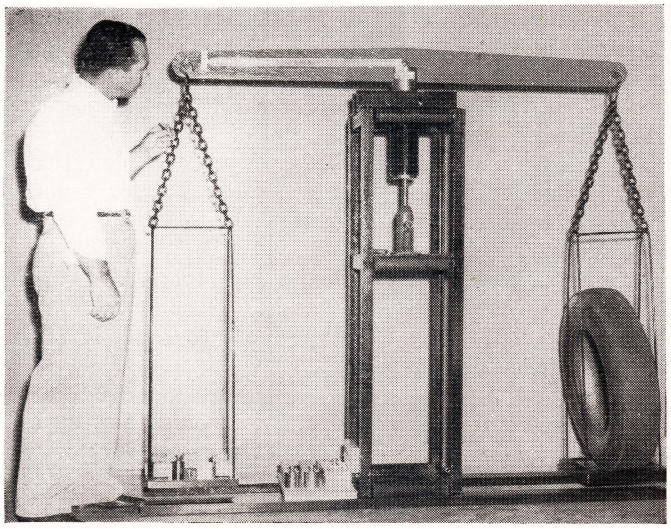
Small cuts made in tires prior to road tests grew only slightly, as shown in chart at right, except on the "Not Acceptable" Ward tires



further worn off until the first tread groove disappeared. Tread grooves are important to prevent skidding; the disappearance of the first tread groove was taken as the end point of the test because this is the point at which a tire begins to be unsafe unless retreaded.

By comparing the known loss of weight for each tire per 12,800 miles of actual road wear with the weight lost before the first tread groove disappeared, it was possible to estimate the total anticipated life of each tire's tread. On this basis, the brands tested ranked in this order with respect to anticipated tread life (approximate):

NAME OF BRAND	ESTIMATED MILEAGE
GOODRICH Silvertown	36,000
GOODYEAR DeLuxe Rib	36,000
SEARS Allstate Premium Quality	33,000
GENERAL Silent Grip	31,000
SEIBERLING Safety	30,000
WARDS Supreme	29,000
FIRESTONE DeLuxe Champion	28,000
U. S. ROYAL DeLuxe	27,000



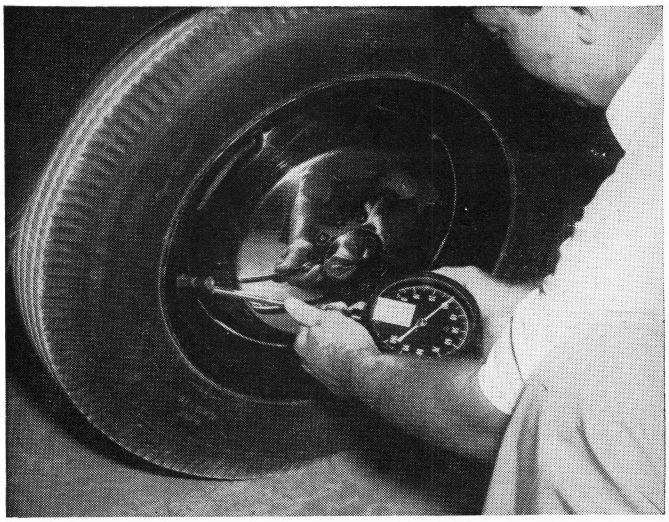
The scale above was specially constructed for CU's tire testing project. It weighs wheel-and-tire assemblies to within one gram (one part in 20,000)

The preceding table must be taken with several qualifications. The estimated mileages are for tread wear under CU's test conditions; different climates, road surfaces, driving speeds, and braking and turning habits along with aging, would, of course, produce different mileage figures—though the ranking might not be significantly changed. Tread wear as reflected in the table is only one important characteristic of a good tire; thus the *Goodyear* DeLuxe Rib, which ranks along with the *Goodrich,* at the head of the estimated tread-wear mileage table, was rated only Fair on the basis of overall test results. Finally, there was considerable variation within each brand. The average variation of the better and poorer samples from the figures shown in the table above was plus or minus about 2500 miles; the extreme variation, found in the *Sears,* was plus or minus about 4500 miles.

The test for tread wear showed up one interesting sidelight. The *Sears* tires are advertised as having 35% more tread than competitive tires. CU found this claim to be substantially correct. But, the amount of tread wear which a tire will withstand is, of course, a resultant of two factors: the thickness of the tread *and* the resistance of the tread to wear. In the road tests, the *Sears* tires showed a very rapid rate of wear. The extra tread, far from being a net dividend for the consumer as implied in the advertising, in part simply counterbalanced this high wear rate. Taking one factor with the other, the estimated tread life of the *Sears* tire was relatively good.

Carcass strength

Even more important than tread wear from the point of view of safety, in CU's opinion, is carcass strength, which governs resistance to bruises. Even a reasonably careful driver may bruise a tire—by driving over a stone, or a hole, or backing into a curb, etc. Tire failures due to such causes are more frequent than is commonly realized.



Tire pressure was checked periodically, using a carefully calibrated gauge. Pressure was adjusted to equivalent of 28 pounds at 68°F

For reasons of safety as well as economy, a tire carcass should be strong enough to survive injuries of this kind.

The Federal specification test for carcass strength is to force a cylindrical steel plunger with a 1¼-inch diameter round tip into the tire at various points, measuring the pressure necessary to penetrate the tire, and the depth of penetration. Because large quantities of tires are sold to the Federal government, almost every tire now on the market is designed to do reasonably well, when new, in this plunger test.

The plunger test is frequently run on new tires. Present Federal specifications require, however, that it be run on tires which have been through a laboratory endurance test. CU went one step further, and ran the test after 12,800 miles of actual road wear under strenuous conditions. The CU test thus measured something more important to consumers than carcass strength new—namely, carcass strength at about the midpoint of the tire's anticipated life.

CU's tests indicated the superiority of rayon over cotton cords from the point of view of carcass strength following wear. The three brands rated Good all proved significantly better in the plunger tests than the four brands rated Fair. The Good brands all used rayon cord, and all were still able to meet the Federal specification—a breaking energy value of not less than 2500 inch-pounds—after 12,800 miles of fast driving on hot days with a 20% overload. The four brands using cotton cords, in contrast, had lost a significant proportion of their carcass strength and could no longer meet the requirements of the Federal specifications for new tires.

Little variation between samples of the same brand was noted in this plunger test.

Cut growth

Any tire, during ordinary travel, will suffer various small cuts and nicks. In a properly made tire these cuts will not grow materially during further wear. To test cut growth numerous small cuts of uniform length and depth were made in each tire, and the growth of these cuts was measured periodically in the course of the road tests.

It was on the basis of this test that the *Wards* Supreme was rated Not Acceptable. Many cuts on both samples tested grew far out of proportion to cut growth on any other brand. At the end of 12,800 miles, one sample showed such a separation of tread and fabric as to be judged unsafe, and the other was badly damaged. The other seven brands all proved satisfactory with respect to cut growth.

Power loss

A characteristic of tires which not many consumers appreciate is the extent to which they may cause decreased mileage per gallon of gasoline owing to the amount of power used in overcoming the resistance of the tire to flexing. This is known as "power loss factor." It is to minimize this type of power loss that cars entered in miles-per-gallon contests sometimes use tire pressures as high as 110 pounds (CONSUMER REPORTS, June).

Continued on next page

AUTO TIRES continued

CU's tests for power loss were experimental. Cars were driven at 60 miles an hour over a 62-mile stretch, and tire pressure measured as an index of tire temperature, which is in turn a rough index of power loss. The results were in general too rough to be reliable. Under the conditions of the test as described, the pressures of the tires increased from 28 pounds to approximately 37 pounds, with small differences from tire to tire. CU expects, by a modification of the method, to procure more precise power loss data in future tests, covering tires of other sizes. Such testing will be done after tire construction, which is now in a state of flux, becomes more stable.

RATINGS OF EIGHT BRANDS OF AUTOMOBILE TIRES:

All tires tested were purchased in the summer of 1950. All were size 6.00x16; it is not known whether test results apply to other tire sizes. All were standard four-ply, black-wall, "first line" tires. All Acceptable brands were satisfactory with respect to cut growth (see story). Prices are list prices in New York City as of early October 1950, and include the $1.09 Federal tax.

ACCEPTABLE—Good

¶ *In order of estimated overall quality. Differences between adjacent brands were small.*

■ **GENERAL** Silent Grip (General Tire Co., Akron, Ohio). $21.89. Estimated tread wear about 31,000 miles. Strong carcass after road wear. Samples tested had rayon cord; manufacturer advises that current production is cotton.

■ **SEARS** Allstate Premium Quality (Sears-Roebuck). $19.04 in retail stores; Cat. No. 95 D 06700 ($13.97 plus shipping charges). Estimated tread wear about 33,000 miles. Strong carcass after road wear. Samples tested had rayon cord; company states that current production is rayon, but that it may be necessary to use cotton cord hereafter "as a last resort."

■ **GOODRICH** Silvertown (B. F. Goodrich Co., Akron, Ohio). $19.79. Estimated tread wear about 36,000 miles. Strong carcass after road wear. Samples tested had rayon cord; manufacturer states that it is currently using either rayon or cotton depending on availability.

ACCEPTABLE—Fair

¶ *In order of estimated tread wear (differences in other factors were not significant).*

■ **GOODYEAR** De Luxe Rib (Goodyear Tire & Rubber Co., Akron, Ohio). $19.79. Estimated tread wear about 36,000 miles. Fair carcass strength after road wear. Samples tested had cotton cord; manufacturer states current production uses either cotton or rayon.

■ **SEIBERLING** Safety (Seiberling Rubber Co., Akron, Ohio). $24.54. Estimated tread wear about 30,000 miles. Fair carcass strength after road wear. Samples tested had cotton cord, and manufacturer states this is also true of current production.

■ **FIRESTONE** De Luxe Champion (Firestone Tire & Rubber Co., Akron, Ohio). $19.79. Estimated tread wear about 28,000 miles. Fair carcass strength after road wear. Samples tested had cotton cord. No information on current production.

■ **U. S. ROYAL** De Luxe (U. S. Rubber Co., Akron, Ohio). $19.79. Estimated tread wear about 27,000 miles. Fair carcass strength after road wear. Samples tested had cotton cord; manufacturer states that it is currently using either rayon or cotton, depending on availability.

NOT ACCEPTABLE

○ **WARDS** Supreme (Montgomery Ward). $19.04 in retail stores: Cat. No. 64 C 1713M ($13.97 plus shipping charges). Not Acceptable because of excessive cut growth. One sample was unsafe after 12,800 miles because of cut growth, and the other sample was seriously damaged. Estimated tread wear about 29,000 miles. Strongest carcass after tread wear of any tire tested. Samples tested had rayon cord, and manufacturer states this is true of current production.

HOW TO MAKE YOUR TIRES LAST LONGER

You can extend the probable life of your tires by keeping them inflated to the right pressure, driving at reasonable speeds, eschewing jack-rabbit starts and brake-jamming stops, and avoiding curb impacts, bruises from rocks or stones on the road, and the like.

Switching tires periodically from wheel to wheel will prevent one tire from wearing out before the others; and turning each tire around on its wheel periodically may extend its life. These techniques may or may not be worth their cost or effort in actual dollars saved, but there is no question that they have a favorable effect on tire life.

A badly aligned wheel, or a seriously unbalanced wheel-and-tire assembly, may cause a tire to wear out faster than it should and in addition may constitute a safety hazard. If one of your tires seems to be wearing too rapidly, it is accordingly a good idea to have alignment and balance checked. But periodical aligning and balancing, in the absence of any indication that they are actually needed, may cost more than they save.

"THE BEST TABLE RADIO TESTED IN RECENT YEARS"

In a period when prices are generally rising and the quality of many products is being deteriorated, CU has taken a third look in as many years at the $79.95 *Zenith* AM-FM table model radio.

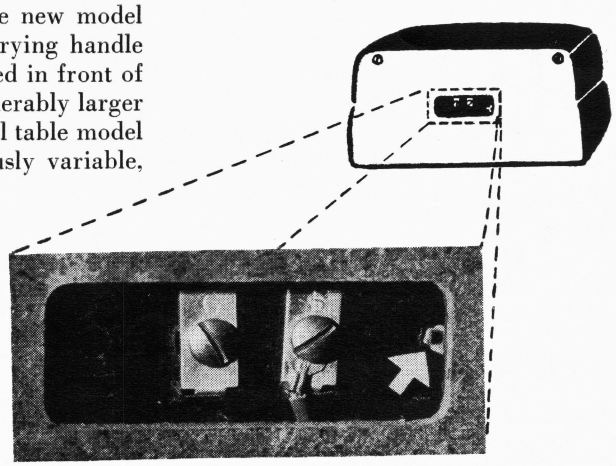
In April 1948 CU described the predecessor of the present *Zenith* G725 as "the best table model receiver tested in recent years." The price at that time was $79.95. In November 1949 CU reported on a more sensitive version of the set, at the same price. This year's model, the G725, is again the best table radio tested in recent years, and the price is still $79.95.

CU tested the new *Zenith* for usable sensitivity, interference rejection, and automatic-volume-control action on both AM and FM. Home use tests were performed to check for "drift" on FM. A listeners' jury rated the set for speech and music reproduction, on both AM and FM, and for hum at low volume. In all of these respects, the new model performed at least as well as its predecessors.

In appearance and convenience features the new model is much like the older ones except that a carrying handle has been added. The tuning dial is still mounted in front of the loudspeaker, which makes possible a considerably larger loudspeaker than the ones used on conventional table model radios. There is the same effective, continuously variable, combination bass-and-treble tone control. Tone for speech and music was very good for a table model radio—although definitely not "high-fidelity."

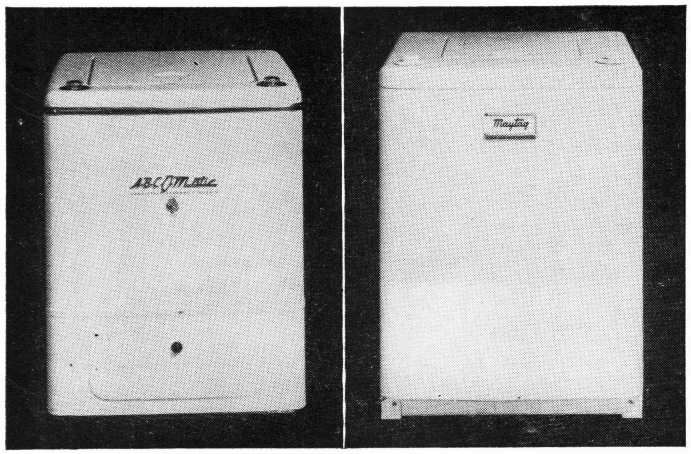
A major annoyance with many FM sets is the difficulty of tuning them precisely; a further annoyance is the intolerable distortion which results when they are even slightly detuned. This tuning problem, indeed, may be a significant factor in the failure of FM to achieve maximum popularity. The *Zenith* G725 tested was relatively easy to tune, and stayed tuned.

The new model does have one design shortcoming. A small eyelet at the rear, just to the right of the antenna terminals, is left partially exposed, and it might be possible to get a severe shock if you touched this eyelet at the same time that you touched grounded metal. Fortunately, the hazard can be very simply eliminated by covering the eyelet with a piece of tape. It could have been very simply eliminated by the manufacturer, too.



A severe shock can be had from the eyelet indicated by arrow. A piece of tape over it will eliminate the hazard

18 models are rated in order of overall quality, and the most expensive were not the best



ABC MAYTAG

automatic washing machines

The 18 automatic washing machines rated this month cost from $220 to $400; on the average this is $165 more than the average cost of the non-automatic machines rated in the June CONSUMER REPORTS, and about $75 more than the semi-automatics rated in July. The automatics cannot be rolled out of the way when not in use; they have more machinery which may break down, wear out, or require service; and they are somewhat more complicated to install—especially those models which require bolting down.

Despite these handicaps, the trend is toward automatic washing machines. Housewives like them because they save time and physical labor, and because of their convenience. Actually, washing clothes with an automatic model takes a little longer, but all of the waiting time can be spent elsewhere. The extra $165 initial cost of an automatic machine works out at about 30c a week if the machine lasts ten years.

The best of the automatic machines rated this month wash clothes just about as clean as the best of the non-automatics rated in June. No acceptable automatic or non-automatic model caused significant wear and tear on clothes in CU's tests. Automatic washers use more electricity, but even so the cost is negligible (less than a penny per load).

The top models on CU's list this year are good machines —far better in many respects than the original *Bendixes* which created such a sensation when they were first introduced. However, some manufacturers have left off special features on their new models which were present in earlier models—for example, the soap injector on the *Bendix*, and a number of good features on earlier *General Electrics* (see page 507). Shortages of steel and other metals may cause actual quality deterioration in future production.

Of the 18 models tested six have to be bolted down. These models have a somewhat lower list price on the average: but a part of the difference is likely to be eaten up in higher installation charges for the bolt-down models. Also there are situations (for example, in apartment kitchens) in which bolt-down models cannot be installed at all. Of the six top models in the ratings only two required bolting down.

The ratings reveal some relatively good and some relatively poor buys. The *ABC* 50 ($279.95), which heads the quality list, was judged to be superior to seven models which cost at least $10 more. The *Sears* bolt-down model ($220 with "suds-saver," $200 without) was the cheapest model tested and may be considered a Best Buy for those who can use a bolt-down machine and have available ample quantities of hot water. It ranked fifth on the quality list—ahead of the $399.95 *General Electric*, the most expensive model tested. One machine, the $304.75 *Frigidaire* WO-65, was rated Not Acceptable.

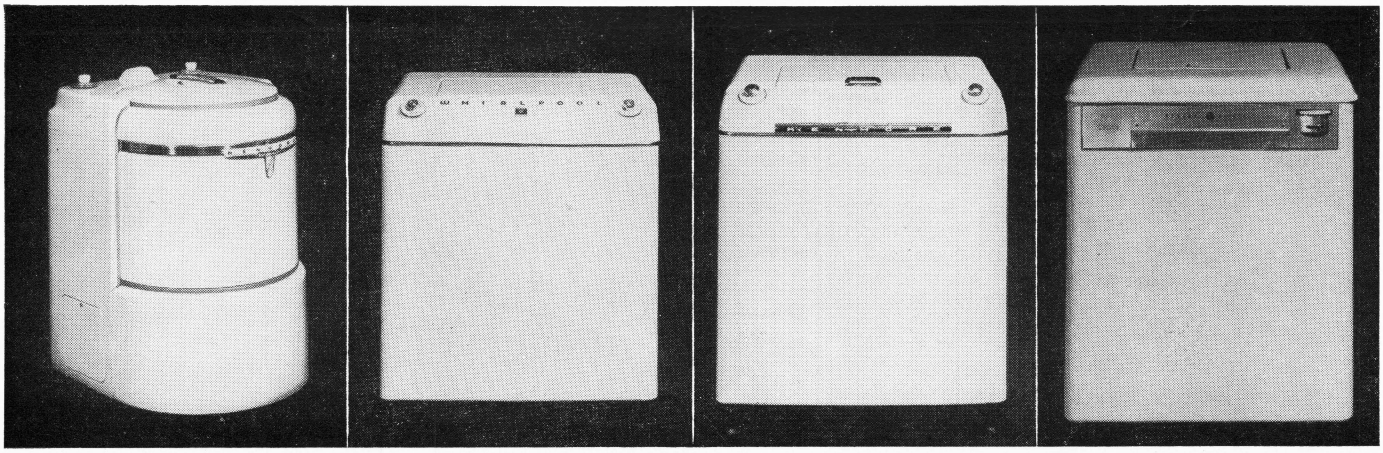
All models were for a-c operation only. All had a capacity of eight to ten pounds except the Norge, which had a rated capacity of 18½ pounds.

CU tested each machine for many different factors. It sought in particular the answers to the following questions: How automatic is each machine? How clean does it wash clothes? How dry does it leave them? How badly does it vibrate? How much water does it use? How fast is it? Does it wear clothes unduly? How convenient is it? How safe is it?

The answers to these questions are considered in order below.

How automatic?

Most of the models tested are alike with respect to operating instructions. You simply set the controls to start



SEARS (bolt-down) WHIRLPOOL SEARS (non-bolt-down) GENERAL ELECTRIC

the water flowing, add soap or synthetic detergent, put in the clothes, and let the machine do the rest. It draws hot water, washes, and spin-dries without further attention on your part.

The *Bendix* Gyramatic, until this fall, went one step further. It had an automatic soap injector. This machine measured out a predetermined amount of soap from a built-in hopper, drew hot water, washed briefly, drained, and then went into its regular wash cycle, injecting a measured amount of soap a second time for the wash. Elimination of the soap injector was one of the changes recently made by Bendix.

The *General Electric* and *Norge* also have pre-wash cycles; but with them, as with the new *Bendix* Gyramatic, you have to be present to add soap when the regular washing begins. On all other models it is possible to give the clothes a pre-wash by suitable manipulation of the controls.

The *Hotpoint*, *AMC*, and *Coronado* machines are less automatic than the others in one respect. They do not draw water automatically at the beginning of the washing cycle. You have to turn on the water, wait until the tub is full (about three minutes with normal water pressure), then turn the main control to "wash." With the *AMC* and *Coronado*, however, the water may flood over onto the floor if you aren't there to turn it off.

A completely automatic machine should enable you to be off about your business during the washing period. And to make this safe, the machine should have some protection in the event that the clothes load becomes unbalanced and gives rise to excessive vibration. The bolt-down models, if this happens, dissipate much of the force which would cause vibration through the concrete blocks to which the machines are bolted. All but five of the non-bolt-down models tested had an automatic cut-off to turn off the motor in the event of excessive vibration. With the five non-bolt-down machines without cut-offs (the *AMC, Bendix, Coronado, General Electric,* and *Hotpoint*), CU advises that you stay within earshot while the washing cycle proceeds, especially if you are washing heavy, bulky pieces.

Washing efficiency

CU tested the ability of each machine to wash eight-pound and ten-pound loads of clothes. An exception was the *Norge*, which was tested with eight and 18-pound loads.

The washing tests were run in much the same way as in previous CU tests—with water at 140° F tap temperature, a 0.1% concentration of neutral powdered soap,* a water-softening compound, and a load composed of sheets, shirts, diapers, and dishtowels, plus eight strips of standard "soil cloth" attached to the dishtowels. Four eight-pound and four ten-pound loads were washed. Each load was run with a soapy wash period of ten minutes.** At the conclusion of each washing-rinsing-drying cycle the soil cloths were removed from the dishtowels, ironed, and their whiteness gauged by CU's laboratory reflectometer. In all, more than 1500 reflectometer readings were taken.

The *ABC* washer washed clothes cleanest (among Acceptable models), followed in very close succession by the *Maytag*, two *Whirlpools*, and the two *Sears* models. The *ABC* had an unusual rubber finned agitator (see rating). The other four used conventional oscillating agitators, as distinguished from rotating drums or tumblers (*Bendix, Westinghouse, Norge*) or "bouncing baskets" (*Apex*). The two *Bendixes* were relatively poorest in washing ability; the *Westinghouse, AMC, Coronado,* and *Hotpoint* were somewhat better.

Machines near the head of the quality list were also checked for their ability to wash half-loads, using half the usual amount of soap and water. The *Maytag* had no provision for using less than a full tub of water. The *ABC* did not wash half-loads quite as clean as full loads, but even so did pretty well. The *Sears* non-bolt-down model

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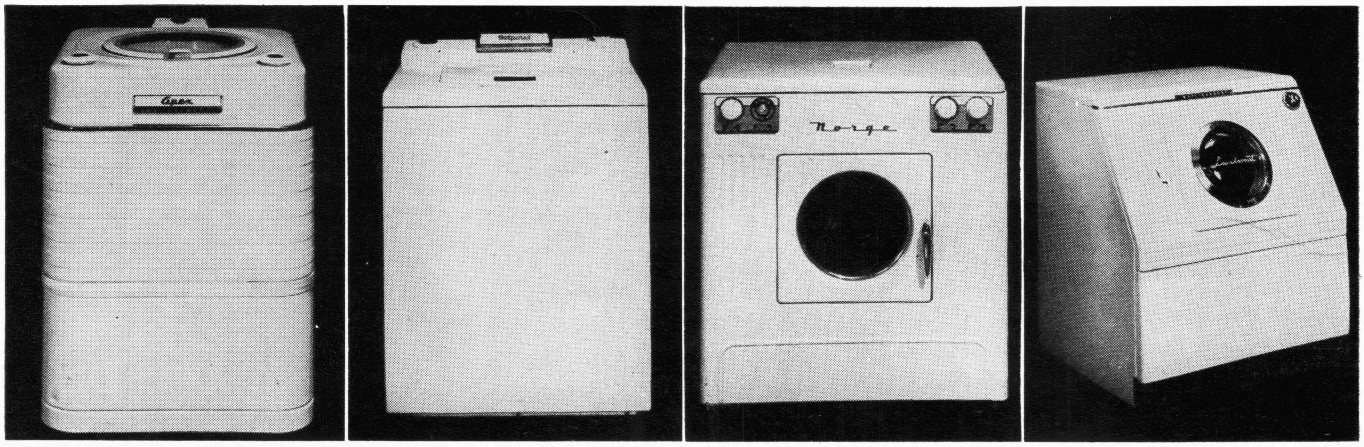
* Except on the *Norge*, where a 0.05% solution was used; with a 0.1% solution the *Norge* foamed over and spilled suds on the floor.

** When set for a hot wash, the Westinghouse machines will run for 15 minutes. In check tests CU found the washing ability of the Westinghouse still low with a 15 minute wash period instead of ten.



APEX HOTPOINT NORGE WESTINGHOUSE (non-bolt-down)

washed half-loads as effectively as full loads. Although no tests of this nature were done on the *Sears* bolt-down and the two *Whirlpool* machines, it is safe to assume that the results on these would be substantially the same, since the four machines have similar construction.

The *Frigidaire*, which uses a unique up-and-down agitator motion, outranked even the *ABC* in washing ability, and also had very effective spin-drying action. But it tangled clothes so badly and so consistently as to be judged Not Acceptable. Tangling is objectionable both because it puts an unnecessary strain on the clothes being washed and because it is a chore to lift the tangled load and a nuisance to untangle the load. Some tangling, but very much less, was noted in the two *Apex* and two *Westinghouse* machines.

All of the machines had spin-driers which damp-dried clothes well enough for them to be hung without further wringing. Except for the *General Electric*, which was very much better than average, and the *Norge*, which was very much worse than average, differences among Acceptable models were not significant.

None of the machines vibrated excessively when the clothes load was properly distributed, except the *Bendix* Gyramatic, a non-bolt-down model, in which the distribution of the load had little effect on the above-average vibration. This model shook the floor during spin-drying.

Water consumption

More than half of the machines drew between 15 and 18 gallons of hot (140° F) water per eight- or ten-pound load of clothes. Exceptions were the *General Electric*, *Whirlpool*, and *Sears* machines, which drew 22 to 26 gallons, and the *Hotpoint* and the *Bendixes*, which drew 11 to 13. The Norge was very economical of hot water for large loads; it would wash 18 pounds of clothes with 20 gallons of hot water (or 25 gallons if a pre-wash was included).

The "suds-saver" or "suds-miser" is available (at a premium of $20) on the *Sears* and *Whirlpool* machines, all four of which use more than the usual amounts of hot water. This device makes it possible to pump the sudsy water out of the machine tub into a stoppered wash tub, then pump it back into the machine for the next load. The re-used water cools some in the process, and this, together with the fact that the water is no longer clean, is likely to result in loss of washing efficiency on second and subsequent loads. The suds-saver is worth its cost only where hot water is expensive or the amount available is inadequate, and in such situations a machine which is more economical of hot water is probably a better solution to the difficulty.

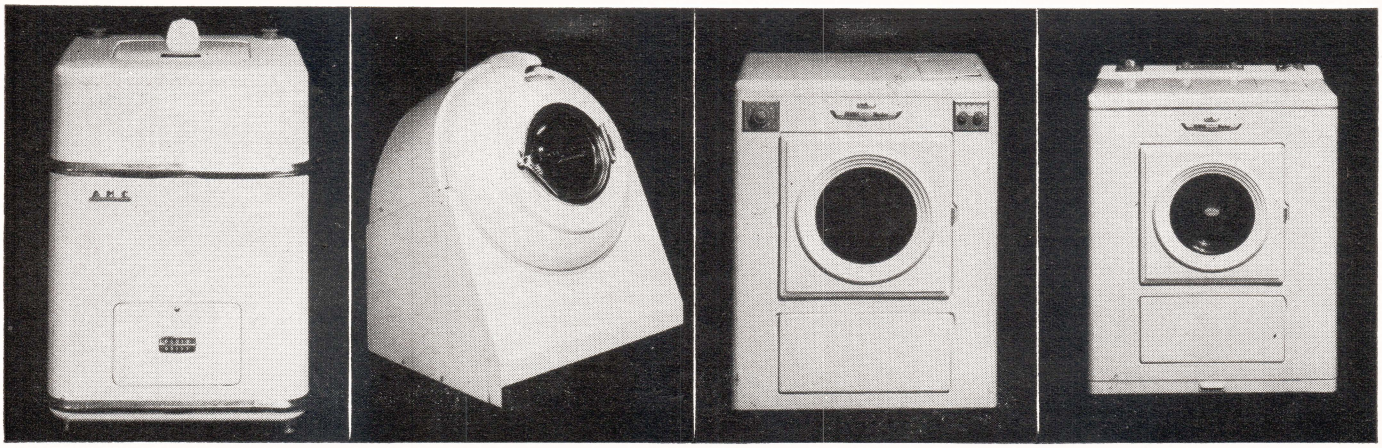
Water consumption figures in the ratings are approximate, and assume hot water at 140° F, cold water at 70° F, and water pressure at 45 pounds per square inch.

If your water pressure is very low, avoid the *Apex* models, which did not go into the spin portion of the cycle if the water pressure was below 25 pounds per square inch, and the *Hotpoint*, which did not fill for rinsing properly at pressures below 20 pounds. All other models operated satisfactorily at test pressures as low as 14 pounds per square inch in CU's tests—except that it took longer for them to fill, and the rinse spray was less vigorous. In the *AMC* and *Coronado* machines somewhat less rinse water is used at this low pressure.

Washing times

On all models, you can set the controls for different soapy washing periods. On some the period may be as long as 20 minutes—an advantage when very dirty clothes are being washed. The *AMC*, *Apex*, *Coronado*, *GE*, *Frigidaire*, and *Hotpoint* models permit you to select soapy wash times only up to 12 minutes or less.

For most clothes loads, ten minutes of washing should be sufficient to get reasonably good results. With a ten-minute soapy wash period, the machines varied considerably in the total time they required for completing the entire cycle. The fastest models were the *Maytag* and the *Frigidaire*, which took about 25 minutes per load as compared with about 36 minutes for the relatively slow *Bendixes*. These speeds were recorded with water pressure at 45 pounds per square inch; lower pressures will increase



AMC | WESTINGHOUSE (bolt-down) | BENDIX (bolt-down) | BENDIX (non-bolt-down)

filling time which, in turn, will increase the total time required.

Wear and tear on clothes

None of the machines wore clothes excessively. CU's test results confirm earlier findings in a university laboratory that if clothes are properly washed the amount of wear and tear from washing is negligible. The laboratory also states that excessive bleaching will significantly weaken fabrics.

Sturdiness of machines

In addition to other tests, each machine was put through 300 complete cycles of washing, rinsing, and spin-drying —the equivalent of about six loads weekly for a year. None of the machines suffered any major breakdown, and none showed significant wear at the end of the test runs. None of them rusted significantly. Several required minor service during the test period, however—a fact which suggests that you would be wise to check the service available in your community before you buy a particular model.

One model was finished entirely in porcelain enamel, which may chip if struck a blow; some were finished with baked enamel, which scratches. Most models were part porcelain and part baked enamel.

Convenience

On the whole, these washing machines are conveniently designed. But CU noted the following convenience shortcomings:

¶ The two *Westinghouses*, the two *Apexes*, and the *Sears* bolt-down model did not have tops flat enough or convenient enough to use as auxiliary working surfaces.

¶ The *Norge*, a side-loading rather than a top-loading model, was so designed that you had to stoop over to load the clothes, and stoop and reach to get them out. The other side-loading machines (*Bendixes* and *Westinghouses*) were not as awkward to load and unload; but you will have a small flood if the door is accidentally opened while one of these machines is full of water.

Pictures on this and the previous three pages show 14 of the 17 Acceptable washers tested, in the order in which they rated. Not shown are the bolt-down Whirlpool (similar to the bolt-down Sears), the Coronado (similar to the AMC), and the bolt-down Apex (similar in appearance to the non-bolt-down Apex shown). The Not Acceptable Frigidaire is shown on the next page

¶ The *General Electric* has an inner tub which, the instructions state, should be removed annually to permit cleaning of the outer tub.

¶ The two *Bendixes* have no direct means by which the motor can be shut off. You have to turn the control knob through the remainder of the cycle, thus momentarily (and needlessly) putting the machine through all its remaining stages en route to "off"; or you have to pull the plug from the socket, then turn the knob, and then re-insert the plug.

¶ The *Norge* and the bolt-down *Bendix* model have control knobs on the front panel rather than the top of the machine, so that you have to stoop and peer to read the dial markings.

¶ The *Westinghouse* has a "weigh-to-save" door, which enables you to weigh a load of clothes as you load for purposes of setting the water saver, but the scale was grossly inaccurate on the sample CU tested.

Hazards

CU checked each machine for shock hazard under ordinary conditions, and under conditions of high temperature and high humidity. None showed shock hazard in the tests. However, it is sometimes possible for shock hazard to develop as a result of wear and tear on the machine. Accordingly, CU strongly recommends that you make sure the machine is properly grounded to a cold-

water pipe when it is initially installed, and that the ground wire is kept connected thereafter. Some models have ground wires built into the hose to the cold-water faucet, but this leaves the machine ungrounded during periods when the hose is for any reason not connected to the faucet.

All of the machines worked satisfactorily on a regular electric circuit with a 15-ampere fuse. Under some circumstances, some machines may blow 15-ampere fuses because of a momentary overload when the motor goes on. If you find this occurring, substitute a 15-ampere "thermal time delay fuse" (such as the *Fusetron*) for the regular fuse. New homes generally have 20-ampere circuits and fuses in the laundry room.

You can avoid the risk of being hurt by the moving agitator or spinner simply by not opening the machine while it is in operation, and by keeping children away from it. The *Maytag*, the non-bolt-down *Apex*, and the *ABC* eliminate the hazard altogether by means of an interlock which stops the machine whenever the lid is raised.

RATINGS OF 18 AUTOMATIC WASHING MACHINES:

Prices are list prices in New York City as of October 1950, and cover delivery and installation, but not plumbing and other structural changes. Dimensions are given in the order, height, width, depth; the depth dimension includes a few extra inches of space for hose connections, etc. Water consumption figures are approximate only (see story). "Total cycle time" was based on a ten-minute wash time, and no pre-wash period. Features not mentioned were judged average or satisfactory.

BEST BUY

¶ *The following model, which rated relatively high and was the cheapest machine tested, is a Best Buy for those who can use a bolt-down model and have ample quantities of hot water.*

■■ **SEARS KENMORE** 110 83520 (Sears-Roebuck). $219.95; $20 less without "Suds-Saver." Available only through Sears retail outlets. Bolting down is required. Top loading; 36x24x28 inches. Uses 25 gal. hot water, 36 gal. total. "Suds-Saver" saves about 15 gal. of hot water for two washes. Spin-drying effectiveness average. Top of machine is not flat enough to use as a work surface. Vibration slight, even with unbalanced clothes load. Has been superseded by Model 83521, which manufacturer claims to be the same except for minor changes.

ACCEPTABLE

¶ *In order of estimated overall quality. Differences between adjacent models were small.*

■ **ABC** 50 (Altorfer Bros. Co., Peoria, Ill.). $279.95. Bolting down not required. Top loading; 36x26x29 inches. Uses 17 gal. hot water, 29 gal. total. Best in washing efficiency among the Acceptable models. Spin-drying effectiveness average. Has rubber-finned agitator which does not rotate, but which moves in a circle around the tub. Safety interlock stops machine automatically when lid is raised. Automatic shut-off in case of severe vibration.

¶ *Washing efficiency of the following five machines was about equal, and second only to that of the ABC among the Acceptable models.*

■ **MAYTAG** AMP (Maytag Co., Newton, Iowa). $279.95. Model AM, without drain pump, costs $5 less. Bolting down not required. Top loading; 36x25x29 inches. Uses 18 gal. hot water, 29 gal. total. Spin-drying effectiveness average. Relatively short total cycle time (25 min.). Safety interlock stops machine automatically when lid is raised. Automatic shut-off in case of severe vibration.

■ **SEARS KENMORE** 110 93540 (Sears-Roebuck). $254.95; $20 less without "Suds-Saver." Available only through Sears retail outlets. Bolting down not required. Top-loading; 36x30x29 inches. Uses 25 gal. hot water, 36 gal. total. "Suds-Saver" saves about 15 gal. hot water for two washes. Spin-drying effectiveness average. Automatic shut-off in case of severe vibration. Has been superseded by Model 93541, which manufacturer claims to be the same except for minor changes.

■ **WHIRLPOOL** 91560 (Whirlpool Corp., St. Joseph, Mich., formerly Nineteen Hundred Corp.). $299.95; $20 less without "Suds-Miser." Superseded by Model 501560 at $319.95 which manufacturer states is the same except for location of control knobs. Bolting down not required. Top loading; 36x30x29 inches. Basically the same in design and performance as the less expensive *Sears* model above; but has various de luxe features. Lid is raised by pushing a button. Ultraviolet lamp produces ozone during agitation (but proof of the value of this is lacking). Loud buzzer sounds one minute before machine shuts itself off.

■■ **SEARS KENMORE** 110 83520 (Sears-Roebuck). $219.95; $20 less without "Suds-Saver." See Best Buy.

■ **WHIRLPOOL** 501540 (Whirlpool Corp.). $249.95; $20 less without "Suds-Miser." Superseded by Model 501520 at $239.95, which manufacturer states is the same except for location of control knobs. Bolting down is required. Top loading; 36x30x29 inches. Uses 25 gal. hot water, 36 gal. total. "Suds-Miser" saves about 15 gal. hot water for two washes. Spin-drying effectiveness average. Some vibration noted.

■ **APEX** 3001P "Wash-a-matic" (Apex Electrical Mfg. Co., Cleveland, Ohio). $349.95; $10 less without drain pump. Bolting down not required. Top loading; 36x26x29 inches. Uses 17 gal. hot water, 26 gal. total. Washing timer provides maximum of only 11 min. soapy wash. Manufacturer states minimum of 25 lb. water pressure per square inch is required to operate washer. Spin-drying effectiveness average. Has unique "Bouncing Basket" washing action. More than average tangling of clothes. Top of machine not flat enough to use as work surface. Safety interlock stops machine automatically when lid is raised. Automatic shut-off in case of severe vibration.

■ **GENERAL ELECTRIC** 1AW 6A 8B (General Electric Co., Bridgeport, Conn.). $399.95. Bolting down not required. Top loading; 36x 27x29 inches. Uses 22 gal. hot water (30 gal. including prewash); 34 gal. total water consumption (42 gal. including prewash). Washing timer provides maximum of only 12 min soapy wash. Spin-drying effectiveness best the machines tested. Has water-saving device for use when washing small loads. No automatic shut-off in case of severe vibration. Relatively noisy; makes loud rubbing noise during agitation with ten-pound loads and vibration noise during spinning may be annoying. Inner tub must be removed annually for cleaning of the outer tub.

■ **APEX** 2-3003P "Wash-a-matic" (Apex Electrical Mfg. Co., Cleveland). $279.95; $10 less without drain pump. Bolting down is required. Top loading; 36x26x29 inches. Uses 17 gal. hot water, 26 gal. total. Washing timer provides maximum of only 11 min. soapy wash. Manufacturer states minimum of 25 lb. water pressure per square inch is required to operate washer. Spin-drying effectiveness average. Has unique "Bouncing Basket" washing action. More than average tangling of clothes. Top of machine not flat enough to use as work surface. Considerable vibration during agitation. No automatic shut-off in case of severe vibration.

■ **HOTPOINT** 10 LC 3 (Hotpoint, Inc., Chicago, Ill.). $329.95. Bolting down not required. Water control, during initial fill, must be turned on and off manually. Top loading; 36x26x28 inches. Uses 11 gal. hot water, 32 gal. total. Uses less water, and rinses less vigorously, if water pressure is low. Will not fill properly for rinsing if water pressure falls below 20 lb. per sq. in. Washing timer provides maximum of only 12 min. soapy wash. Spin-drying effectiveness average. No automatic shut-off with unbalanced load.

■ **NORGE** AW-204 (Norge Div., Borg-Warner Corp., Detroit, Mich.). $339.95. Bolting down is required. Side loading. Opening is rather low; stooping is required to load and to remove clothes; 36x30x27 inches deep with door closed; 40 inches deep with door open. Unusually large rated clothes capacity (18½ lbs.). Uses 20 gal. hot water for a full 18-lb. load (25 with the pre-wash); 32 gal. total (43 with pre-wash). With an 8-lb. load uses 15 gal. hot water (18 with the pre-wash). Spin-drying effectiveness below average; worst machine tested on this count. Tumbler washing action. Control knobs are mounted on the front panel of the machine; it is rather inconvenient to see dial markings. Vibration slight, even with unbalanced clothes load.

■ **WESTINGHOUSE** L-5 Laundromat (Westinghouse Electric Corp., Mansfield, Ohio). $269.95. Bolting down not required. Side loading; 36x31x28 inches with door closed, 43″ deep with door open. Uses 15 gal. hot water, 25 gal. total. Spin-drying effectiveness average. Tumbler washing action. More than average tangling of clothes. Has water-saving device for use when washing small loads. Has "Weigh-to-Save" door with very inaccurate built-in scale. Top flat, but awkward to use as a work surface. Automatic shut-off in case of severe vibration.

■ **AMC** A149FP (Mfd. by Beam Mfg. Co., distrib. through Associated Merchandising Corp. retail stores). $259.95. Bolting down not required. Water control, during initial fill, must be turned on and off manually. Top loading; 36x26x28 inches. Uses 17 gal. hot water, 46 gal. total. Uses less rinse water, and rinses less vigorously, if water pressure is low. Washing timer provides maximum of only 12 min. soapy wash. Spin-drying effectiveness average. No automatic shut-off in case of severe vibration.

■ **CORONADO** G149FP (Mfd. by Beam Mfg. Co., distrib. through Gamble stores). $259.95. Identical with AMC model immediately above, except for minor differences in trim.

■ **WESTINGHOUSE** RL-1-49 Laundromat (Westinghouse Electric Corp.). $219.95. Bolting down is required. Side loading; 36x28x25 inches with door closed; 32 in. deep with door open. Uses 15 gal. hot water, 25 gal. total. Spin-drying effectiveness slightly below average. Tumbler washing action. More than average tangling of clothes. Relatively short cycle time (25 min.). Top of machine not flat enough to use as work surface. More than average vibration, even with balanced clothes load.

■ **BENDIX** B-211 (Bendix Home Appliances, South Bend, Ind.). $199.95. Superseded by Model B-212 ($239.95). New model embodies minor changes which should not affect performance. Bolting down is required. Side loading; 36x26x25 inches deep with door closed; 40 inches deep with door open. Uses 11 gal. hot water (14 with pre-wash), 20 gal. total (24 with pre-wash). Washing efficiency relatively poor; poorest of the machines tested, along with *Bendix* G-316. Spin-drying effectiveness slightly below average. Tumbler washing action. Control knobs mounted on front panel; it is rather inconvenient to see the dial markings. Water-saving device for use when washing small loads. Cleaning lint trap is a nuisance. Vibration slight, even with unbalanced clothes load. Relatively long cycle time. Manual control of cycle not as easy as with most other machines.

■ **BENDIX** G-316 "Gyramatic" (Bendix Home Appliances). $269.95 with soap injector. Superseded by Model G-312 ($289.95); new model lacks soap injector. Other minor changes should not affect performance. Bolting down not required. Side loading; 36x29x27 inches deep with door closed; 42 inches deep with door open. Uses 13 gal. hot water (17 gal. with pre-wash); 22 gal. total (29 with pre-wash). Washing efficiency relatively poor; poorest of the machines tested, along with *Bendix* B-211. Spin-drying effectiveness average. Tumbler washing action. Annoying vibration with or without unbalanced clothes load; no device to shut machine off in case of severe vibration. Has water-saving device for use when washing small loads. Relatively long cycle time. Manual control of cycle not as easy with this machine as with most other machines.

NOT ACCEPTABLE

○ **FRIGIDAIRE** WO-65 (Frigidaire Div., General Motors Corp., Dayton, Ohio). $304.75. Not Acceptable because of excessive tangling of clothes. See story.

NEW MODELS, OLD MODELS, CHANGED MODELS

Since CU last rated automatic washers (CONSUMER REPORTS, April, May, and July 1948), a number of changes have occurred.

In 1948 CU called the *General Electric* "the best of the lot" of eight machines tested. At that time it cost $349.75. It now costs $399.95—and it is a cheapened machine. The maximum washing time available on the dial has been cut from 20 minutes to 12 minutes. The lower, auxiliary tub which made it possible to store in the machine itself the soapy water from one load, and to use it for soaking the next load, has been eliminated. Also eliminated is the device which circulated the water and filtered it.

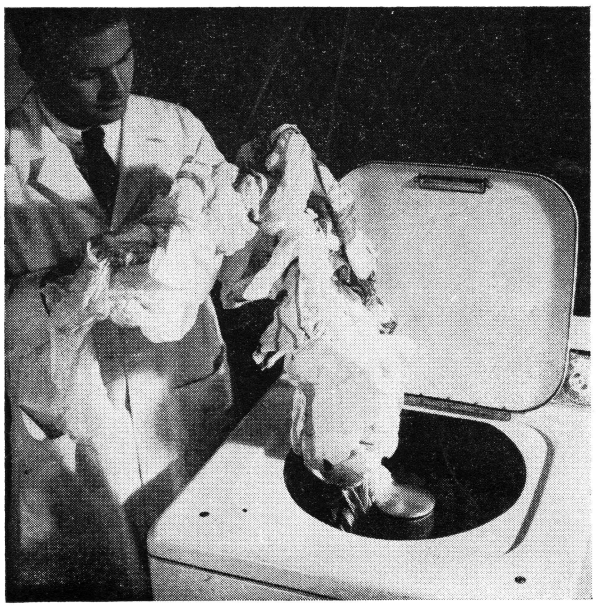
The *Blackstone* was rated Good in CU's 1948 quality list. It was not included this time because a new model is expected before long.

Manufacture of the *Launderall* has been discontinued. In its place is the similar-appearing *Horton*, a new model of which was introduced too late for inclusion in CU's tests.

The *Frigidaire* was rated Not Acceptable in 1948 because it tangled clothes excessively and for other reasons. It is similarly rated this year, because of excessive tangling of clothes.

The *Sears* Kenmore ranked high in 1948, as it does now.

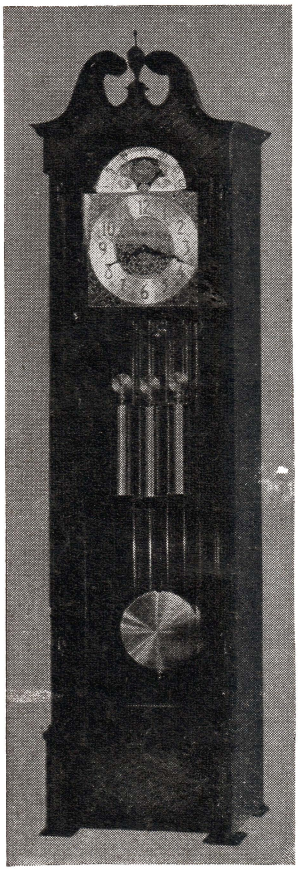
Other models tested in 1948 all rank relatively low this year. They are about as good as ever but better models have come along.



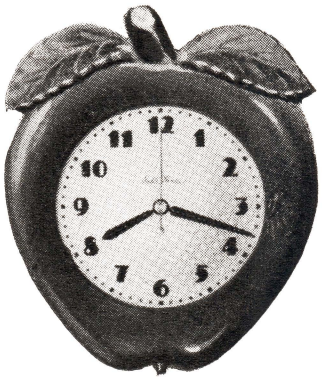
Extent to which Frigidaire tangled clothes appears in this photo taken at end of a test washing cycle

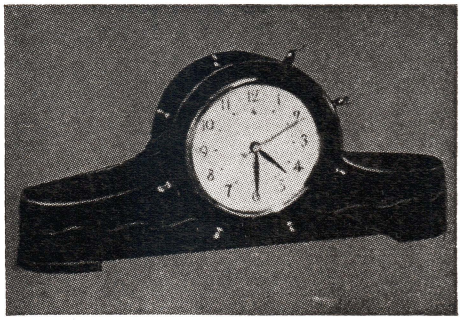
The Shape of Things

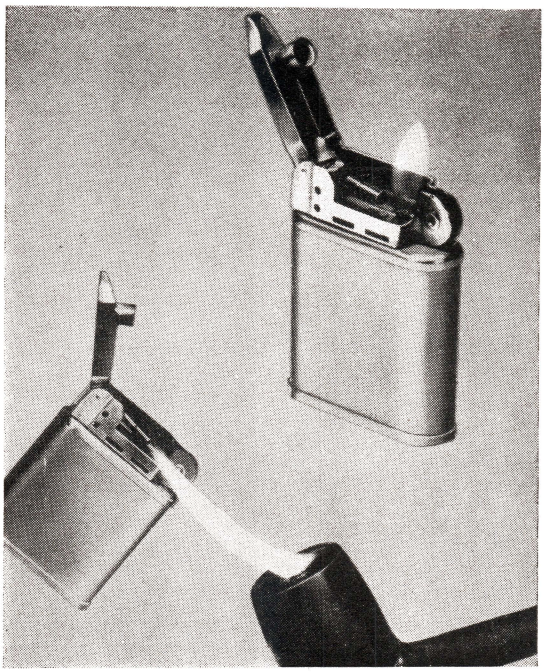
by Eliot Noyes



TRANSFORMATIONS and TRANSMUTATIONS







A curious and somewhat dismal aspect in the design of everyday objects is the unwillingness of manufacturers to let things be themselves. A glance in the window of any gift shop will demonstrate that such simple objects as cocktail shakers and clocks and cigarette lighters are made to look, in varying degrees, less like themselves and more like other things.

The manufacturer may start the process by simply decorating an object; in this way an ashtray acquires ducks on its side. The next stage may consist of increasing the importance of the decorative idea at the expense of the object itself; a cast bronze duck holds an ashtray in his bill, for example. The final stage is reached when the original object has vanished and the superimposed idea is the only thing in sight; the enameled mallard sitting on the table turns out to be an ashtray when you push his tail. There is often a commercial idea somewhere behind such transmutations; in this case the assumption is that hunters can't resist buying anything with a duck motive. In many fields this distortion of the basic nature of useful objects is so much the rule that it makes straightforward design a rare exception.

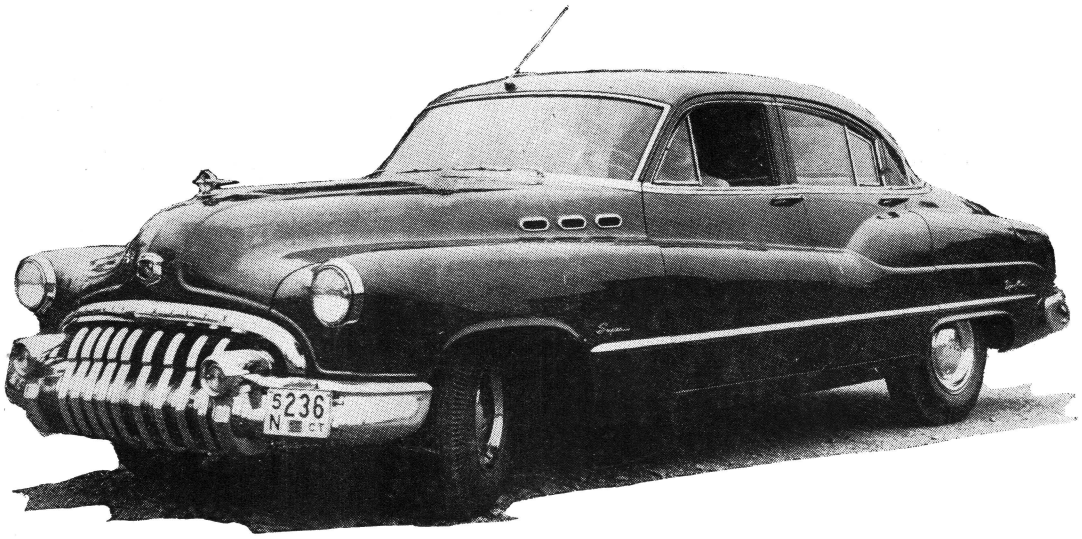
Typical variations of these transformations can be seen in clocks, for example. Here the process begins with an unwillingness to let a kitchen clock be just a good legible clock, so it is set in a bad piece of porcelain sculpture just to be cute. The *Seth Thomas* Pippin, a clock set in an apple, is typical of thousands; clocks come embedded also in teakettles, sunflowers, bluebird breasts, and so on indefinitely. A more specific design tie-in aims at selling clocks through an appeal to people's activities or enthusiasms. This is worked particularly hard on yachtsmen, for whom General Electric (only one of many) makes a clock set in the center of a ship's wheel.

Another twist is to turn everyday objects (particularly mechanical ones) into something old and respectable. We have seen how a television set can be made to look like an 18th Century breakfront (CONSUMER REPORTS, June 1947 and July 1949). In similar vein, GE (without even cracking a smile) sells an electric grandfather clock complete with swinging pendulum for those who want ready-made evidence of ancestry and incidentally want to know what time it is. In contrast, it is refreshing to find the *GE* Gourmet as a straightforward design decorative on its own terms.

The transformation for snob appeal is found with great frequency in cigarette lighters. Throughout the land, to judge by the evidence, vast ingenuity is being expended in making table lighters look like urns, antique oil lamps, old English silver, or even silver cornucopias, as in the example illustrated. Sometimes the changed appearance is intended only in the spirit of good clean fun. A cocktail shaker in the form of a hydrant is just a joke, after all. Fun in design is perfectly legitimate, but most applied fun in the design world is heavy-handed and unfunny. The shiny model airplane which turns out to be a lighter when you spin the propeller is a poor joke in an ugly object.

A peak of some sort seems to have been reached in a *Dunhill* table lighter which has everything. To be specific, it is not recognizable as a lighter, it has snob appeal and a touch of nostalgia, and it is a joke—almost a pun. This is the table lighter which is described as being "an exact replica of an 18th Century Tinder Pistol." The fact that it is a cigarette lighter is completely concealed until you pull the trigger. Such mistaken identity could be disastrous; a man intent on suicide might merely singe his sideburns, while a less violent type wishing to light a cigarette might blow his brains out.

After all these eccentricities it is a pleasure to find such straightforward design as the *Beattie* Jet Lighter. It is too bad that the desire to make objects handsome in their own right is so rare.



A point-by-point comparison of the BUICK *Super*

Direct comparison of a *DeSoto* Custom and a *Buick* Super illustrates the fallacy of a "They're all good cars" approach to buying an automobile. If you were to use this approach, one car or the other would be sure to disappoint you, for though both are good cars they are by no means equally good for doing the same things.

If, as CU's consultants have been doing, you drove the *DeSoto* and the *Buick* Super at the same speeds over the same route, composed of varying types of road surface and traffic conditions, here are some of the differences you would observe.

Over most road surfaces the *DeSoto* gives a softer, more comfortable, ride; but on rough roads at higher speeds the *Buick* has superior ride control and less tendency to toss its passengers. The *Buick* hugs the road better and has better roadability, rating as excellent in this respect, and thus to a large extent making up for its harder steering; both roadability and ease of steering are factors affecting driver fatigue. The easier steering of the *DeSoto* is especially advantageous in traffic and in parking.

The *DeSoto* ran considerably quieter and smoother at all speeds below 70 mph, and had a velvety feel entirely lacking in the *Buick* (this without taking into account the added engine noise when *Buick's* Dynaflow is working).

The *DeSoto's* resistance to shaking of front-end sheet metal on rough roads was only average, that of the *Buick* considerably better than average. But the *Buick* structure had an unpleasant and extremely undesirable amount of "buckboard effect," or general up-and-down vibration of the chassis and body on anything approaching a washboard surface.

It is easy to conclude, from the figures given at right, that the *Buick* Super is a far faster and more powerful performer than the *DeSoto*. This would be true even without the passing and accelerating boost given by the Dynaflow transmission. As noted previously, the Chrysler Corporation's four-speed transmission and fluid flywheel normally can provide neither outstanding acceleration in traffic nor a traffic-passing burst of power at speeds above 40 mph. It nevertheless has three advantages over the Dynaflow. The *DeSoto* can be driven with much less revving up of the engine in traffic (or, for example, in ascending hills at 30 mph or so); the *DeSoto's* low range holds back far better than the *Buick's* in descending steep grades; and, in driving on level roads, the *DeSoto* slows down in normal fashion when the accelerator is released, while the *Buick* coasts rapidly, almost as if it were free-wheeling (the same thing is true of the *Chevrolet* Powerglide). Aggravating this situation, the *Buick* brake pedal is high, and so is the

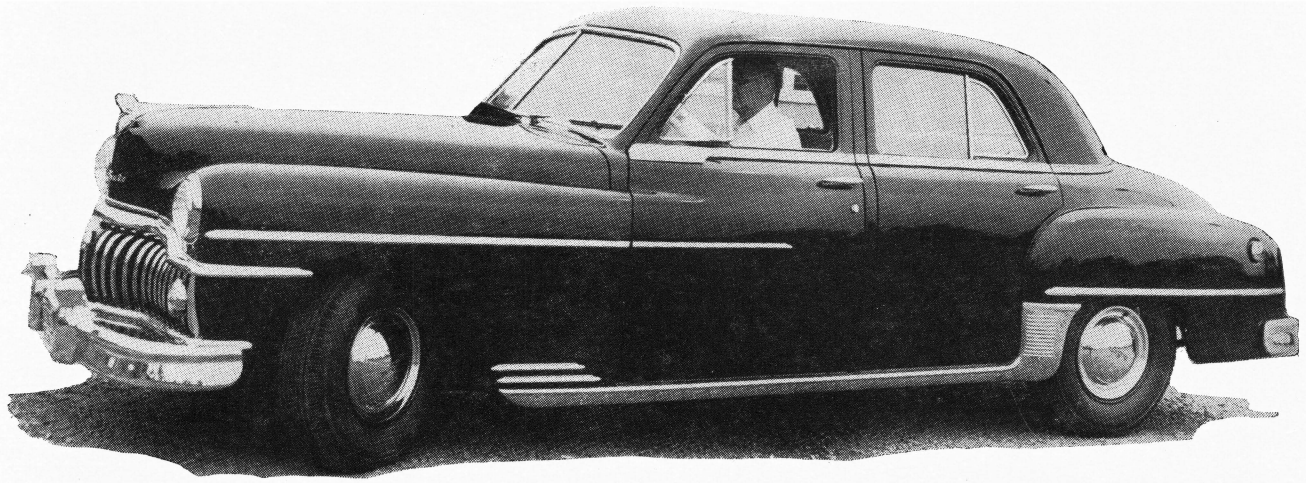
FACTS AND FIGURES

• FACTORY DELIVERED PRICES: CU's Dynaflow *Buick* Super, Model 51, $2308. CU's *DeSoto* Custom (de luxe) with Tip-Toe shift as standard equipment, $2196.

• WEIGHT (curb weights of CU's samples): *Buick* Super, 4035 lb., 46.5% (1876 lb.) on rear wheels. *DeSoto*, 3675 lb., 44% (1615 lb.) on rear wheels, indicating somewhat better winter traction for the *Buick*, and longer tire wear for the *DeSoto*.

• APPROXIMATE WALLED-CIRCLE in which car will turn (to left): *Buick*, 45 feet diameter; *DeSoto*, 51 feet.

• GASOLINE MILEAGE at constant speed on level roads: At 30 mph—*DeSoto* 25 mpg, *Buick* 21.7. At 40 mph—*DeSoto* 22.7 mpg, *Buick* 20.2. At 50—*DeSoto* 20 mpg, *Buick* 18.4. At 60 mph—*DeSoto* 17.3 mpg, *Buick* 16. On Cu's simulated traffic test, *DeSoto*, 12.4 mpg at an average 20 mph; *Buick*, 11.7 mpg at 20.4 mph. Overall mileage during test period: *DeSoto*, 15.8 mpg



and the Custom **DESOTO** *based on CU's road tests*

initial pressure required to depress it. The *DeSoto* brakes are easier to apply, softer in action, and much more liberal, in proportion to the weight they have to control.

As might be expected, the less powerful car gives the better gas mileage. Despite the *DeSoto's* margin in this respect, however, CU feels that in proportion to the power available, the higher-compression, slower-turning *Buick* engine is doing a more efficient job.

Vision, seating, controls

Though the *Buick* windshield is flanked by narrow pillars, and provides a wider angle of horizontal vision (and, over the hood, a somewhat closer view of the curb), it has insufficient vertical accommodation for both short and tall drivers, relatively poor wiper-swept area, and considerable optical distortion in several places. The *Buick* rear window has great horizontal width, which eliminates blind spots, but the view to the rear is limited as to distance, narrow vertically, and very badly distorted. Bearing in mind that glass is put into a car to be looked through, the *DeSoto* gets another point, for its glass has no noticeable optical distortion.

Buick seats, both front and rear, are much wider than the *DeSoto's* (the whole car is half a foot wider over-all), but they are low and less comfortable. The free, or unloaded, height of the *DeSoto* seats is two inches greater in front, four inches greater in the rear seat. The *Buick's* sharply pitched front seat with a steering wheel which is high and hard to see over is particularly unsatisfactory. The *Buick* rear seat has less knee- and head-room, and three inches more shoulder room, and is harder to enter and leave than the *DeSoto.* Many families will like the wider *Buick* seats, however.

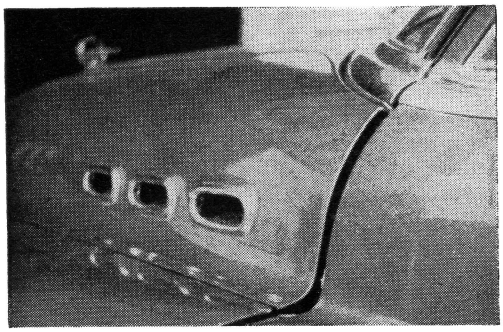
Each test sample had one hard-closing door. Sheet metal fits and general details of ornament were in general superior on the *DeSoto.* The *DeSoto* was a post-Chrysler-strike car, but aside from the poor door fit and one misapplied chrome strip, had nothing out of the ordinary wrong with its body.

The *DeSoto* instruments are the most easily read and their arrangement is the simplest of any that CU's consultants have seen. *Buick's* dials (except the speedometer, which incorporates a useful trip mileage indicator) are scattered, rudimentary, and hard to read, day or night. The right-hand location of *Buick's* turn-indicator, just over (and easily confused with) the gear-selector lever, was criticized by nearly every driver of the car. The *Buick* foot-operated parking brake was reliable, the *DeSoto* hand brake on CU's car was not (it has been changed for the better).

for 2160 miles; *Buick*, 14.5 mpg for 1990 miles. Oil consumption normal for both cars.

• PERFORMANCE: Acceleration on 9% grade from 30 to 40 mph (*DeSoto* shifts back to third speed, *Buick* torque converter changes ratio)—*DeSoto*, 5.8 seconds; *Buick*, 10.0 seconds. Since the *DeSoto* axle ratio is now the same (3.9 to 1) with or without Tip-Toe Shift, this test was also made with the *DeSoto* downshift inoperative, giving an approximate figure for the standard transmission model of 24 seconds. Acceleration on grade from 30 to 50 mph—*DeSoto* did not reach 50 mph; *Buick*, 31.3 seconds. Terminal speed on the grade—*DeSoto*, 49 mph, *Buick*, 54 mph. Going *down* hill, in low range, the terminal speeds were: *DeSoto* 21 mph, *Buick* 24 mph.

• QUARTER MILE FROM STANDING START: *DeSoto* (using first, third and top gears)—average, 21.8 seconds; *Buick* (using both Low and Drive range)—average, 20 seconds.



The Buick CU bought had a gaping crack where the front door and hood were supposed to come together. In general the DeSoto metal fit was better

Some light on the relative durability of the various *DeSoto* and *Buick* models of past years (as well as other cars) comes from the auto questionnaires answered in 1949 by some 49,000 CU subscribers. Except for *Studebaker, Hudson, Kaiser-Frazer,* and *Mercury* (which were newer as a group), the ages of all other brands reported on were comparable, the median age being that of 1947 models. Of these cars *DeSotos* averaged the lowest volume of repairs. *Buicks* rated 11th in a field of 14.

Actually, of course, it is the *Chrysler* Six which competes with the *Buick* Super; the *DeSoto* (similar to the *Chrysler*) lies between the *Buick* Special and the Super (which, again, have similar characteristics). *Chryslers* ranked third lowest on CU's compilation of total repairs reported by owners; in fact, four of the least-repaired six cars on the 14-car list were Chrysler-built.

Summing up

In general, CU's consultants found the *DeSoto* to be a pleasantly hushed, slick-running car of uninspired performance; the *Buick,* rather rough and noisy for a car of its price, able rather than slick in action, roomy, but designed with less consideration for its driver and occupants. Where powerful performance is essential, particularly in hilly or mountainous country, the *DeSoto* takes a back seat—the *Buick* is far superior. And for fast or long-continued driving over main or secondary highways, the *Buick,* despite its inferior seating, rates well ahead of the *DeSoto.* On the other hand, for service in congested city traffic, narrow streets, or suburban errand-running, the *Buick* is about as far from ideal as a car can be, and the *DeSoto* does very well, though it won't win any races away from traffic lights. For general family or all-round use, where sustained open-road speeds seldom reach 55 mph —or 60 on good roads—the *DeSoto* is, on the whole, clearly preferable to the *Buick.* It is easier and more pleasant to drive, quieter, and more comfortable. The *Buick* is a more exciting car to drive, and has more prestige value, but quality is less evident in it than in the *DeSoto.*

some auto accessories

Auto accessories are often enough nothing more than useless gewgaws. But in the overflowing stocks of the auto stores are also some which cost comparatively little and which can pay their way by making driving easier. Here is a list of useful accessories compiled by CU's auto consultants:

¶ Traffic being what it is, an outside rear-view mirror is useful to advise when it's safe to pass or change lane. The *Roberk* (about $2 to $3, depending on size) is recommended because its adjustment stays put.

¶ Lost keys and a locked car spell inconvenience or real trouble. Some motorists hide a spare set underneath the car. *Hide-a-Key* or any similar small box with magnet feet makes this precaution easy (50c up).

¶ The best windshield cleaning device CU has found is a felt pad and squeegee gadget called the *Anco* Speed Pad (about 75c). It uses plain water, avoiding the smear of oily sprays.

¶ If rain freezes on the windshield while the car is parked, a plastic scraper will get it off without scratching the glass (10c up).

¶ For over-the-road drivers a windshield washer (about $6.50 plus installation for either *Trico* or *MoPar*) removes grime and dust to an extent that takes it out of the "gadget" class.

¶ Magnetized cowl trays provide a handy place for odds and ends such as coins and pipes, and don't mar the paint (as vacuum-cup trays do). Plastic or a dull finish is desirable (89c and up).

¶ The cheapest way to stop glare coming from the car behind via the rear-view mirror, without at the same time blocking your view to the rear, is with a plastic flipdown glare shield (about 40c).

¶ A tire gauge, used to spot an out-of-line pressure drop, will prevent many roadside flats as well as the tire damage that comes from under-inflation. CU recommends the *Schrader* Glove Compartment Gauge, No. 5050 (about $1.50).

¶ Pulling out of icy or muddy holes and ruts in wintertime can be greatly simplified with a set of expanded metal tracks placed under the driving wheels ($2 and up per pair).

¶ A small fuel filter such as the *Carter* Ceramic installed where the gasoline enters the carburetor is good insurance against trouble from water and dirt in the fuel lines (about $2.50).

¶ Directional signals, available in kits for installation on cars not equipped with them, are very worth while for any driver who can count on himself to turn them on; and, in the case of the non-automatic type, off (about $7 and up).

JEWELS

The important gems in this necklace, the star rubies, are synthetics. The small diamonds are real. Even with synthetics, it sells for $6000

The necklace and matching earrings below make a good show for the money—$17.50. The stones, of course, are simulated

Jewels above are all real. The ring at the left has a 60-carat star sapphire, the middle one a cut sapphire and small rubies, and the other rubies and diamonds. Together, the rings cost $20,000

Stimulated by bare-shoulder fashions and prosperity, the annual expenditure for jewelry at retail in the country is now more than a billion dollars, with a fifth of this amount going to the Government in excise taxes.

It is a fascinating business of confusing and mysterious terms, and it has been complicated further since World War II by important technical advances in man-made gems. In probably no other business are so many important purchases made under emotional stress. In no other business is the ordinary buyer so dependent on the knowledge and integrity of the seller. Conversely, in no other field is a little understanding of values, even of a general nature, likely to be more rewarding.

The first, the oldest, and the most important stones used in jewelry are the natural gemstones created by heat and pressure in the earth and mined therefrom usually with considerable difficulty. The four most valuable of these—the diamond, ruby, emerald, and sapphire—are termed precious stones. Others attractive enough for jewelry, many of them relatively low in price, are known as semi-precious or ornamental stones.

There are also synthetic gemstones, created by men in laboratories and factories. These synthetics, made in America in any quantity only since World War II, not only have the color and appearance of their natural counterparts, but are of the same chemical composition. Every precious stone except the diamond has been commercially synthesized and even the diamond now has a man-made rival of sorts in synthetic rutile, a softer titanium dioxide material. Only an expert with scientific equipment can distinguish some synthetics—the latest synthetic emeralds, for example.

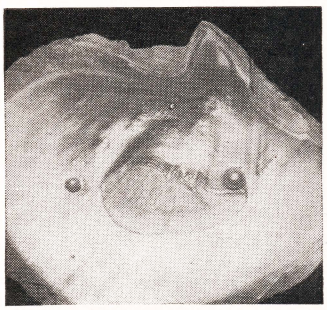
Finally, there are the pure imitations, usually of glass or plastic material, which have only a superficial resemblance to natural stones. These are usually advertised as "simulated" versions of what they purport to represent. The bulk of ten-cent and department store costume jewelry is set with these stones. The terms "simulated" and "synthetic" are often confused. A synthetic gem, as noted, duplicates the actual material of a natural stone, while a simulated one duplicates principally its color, and this not too faithfully.

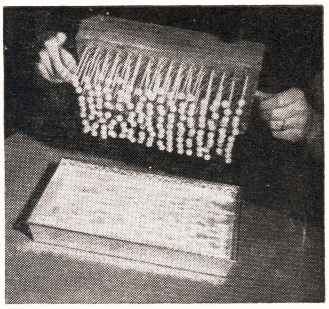
Pearls, which are organic rather than mineral gems, have three corresponding classifications. Most valuable are the natural or oriental pearls, found since ancient times in some types of oysters. Next in value are cultured pearls. These are also grown in oysters, principally in Japan, but the center is a man-inserted bead which may have only a few outer layers of the natural pearl nacre. Finally, there are vast quantities of imitation pearls made of glass, plastics, and fish-scale lacquer. Attractive cultured and simulated pearls have won such popular acceptance that they have dealt cruel blows to the natural pearl market. Natural pearl necklaces for which huge sums were paid some years ago now command only a small fraction of their former prices.

Continued on next page

The accompanying article was written for CU by a consultant in the field of jewels. Most of the pictures are from the recent book, "Gems and Jewelry," by Marcus Baerwald and Tom Mahoney (Marcel Rodd Co., Inc., New York; $10).

Natural vs. simulated: pearls



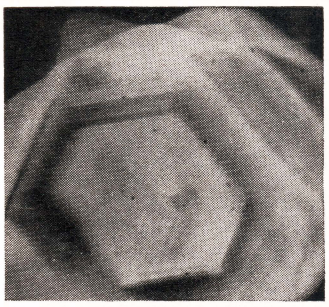


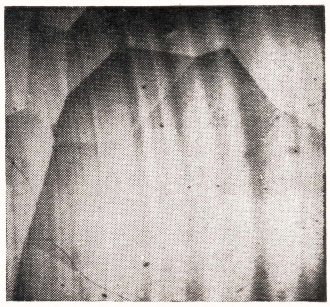
The value of natural pearls has been greatly cut by the acceptance of both cultured and simulated or imitation pearls. Simulated pearls are usually made by dipping beads in a fish-scale solution

Natural vs. synthetic: emeralds

Carroll Chatham, who helped develop synthetics, examines man-made emeralds. They're among the most difficult synthetics to tell from real gems

Natural vs. synthetic: sapphires





Under magnification you can see the curved growth lines of a synthetic sapphire (right), absent in the natural stone. These pictures were taken with 25-power magnification, but the distinction can be seen with an ordinary 10-power jeweler's loupe

Experts agree that the intrinsic value of any stone and its setting depends on four varying factors. These are: 1) beauty, 2) durability and hardness, 3) rarity, and 4) fashion. Experts often disagree, however, on how these qualities add up in a particular piece. The radio give-away programs, for example, have had more complaints about jewelry than about any other kind of prize. Jewelers in the home towns of the winners, who often want to sell the items, frequently place such a low value on what was announced as a valuable prize that the winner complains even though he paid nothing. This sort of difficulty, and also the disparity between what a gem owner paid for his stone and what he can sell it for is, of course, explained in part by the fact that he buys or receives at retail and usually must sell at the wholesale price level.

But appearances in jewelry are, of course, notoriously deceptive. A synthetic ruby overpriced at $5 can look very much like a natural one that would be a bargain at $500. Rarity makes the difference. Synthetic rubies, made principally for watch bearings, are now produced by the yard. Natural rubies, especially in large sizes, are rare. Unlike pearls, the important natural stones so far have not been affected in value by the synthetics.

Size is naturally a rarity factor in gems, for as natural stones are scarcer in large sizes, these are worth more per carat than smaller specimens of the same quality.

The relative hardness of gemstones is indicated by Mohs's scale, named for Friederich Mohs, the mineralogist who arranged it. The diamond is 10 on this scale. All other gems have lower numbers and each will scratch any other with the same or a lesser hardness number. For this reason gems should never be thrown indiscriminately together. Rubies and sapphires are 9, emeralds and topazes are 8, and most gemstones used in jewelry have a hardness of more than 6 on the Mohs scale.

The beauty of a gem reflects various inherent characteristics—brilliance, luster, fire, color, and usually transparency (jade, opal, lapis lazuli, and some others are exceptions)—and also the skill and artistry with which the stone has been cut, polished, and mounted. The cutting of the surfaces of many stones into facets is done to attain the maximum reflection of light, which increases color, fire, and brilliance. Older forms, however, survive in the cabochon cuts for star rubies and star sapphires, opals, and others for which a curved surface best presents unusual markings, sheen, or color.

Except for diamonds, in which the colorless or blue-white is usually desired, color figures largely in the popularity of gems. The colors range from the rich brilliant reds and greens of rubies and emeralds to the delicate hues of aquamarines and kunzite. The same gem is sometimes found in several colors. Sapphires, usually blue, also come in yellow, violet, green, and orange. Nor are all topazes yellow. They may also be orange, pink, white, or light blue. Color alone is usually an insufficient means of identifying a gem.

Precise identification requires technical equipment, but simple observation will provide some clues. When held to the tongue or cheek, glass will become warm almost at once, while the crystallized gems, with the exception of

amber, jet, and to a lesser extent, opal, will remain cold for some time. A drop of water usually holds its shape on natural and synthetic stones but wets and spreads on glass.

The usual ten-power magnification of the jeweler's loupe is sufficient to reveal the characteristic curved growth lines of synthetic rubies and sapphires. These growth lines are absent in natural stones and any lines which are visible are straight or angular. A ten-power magnifier can also be used to determine whether a diamond, ruby, sapphire, or emerald is "perfect" from a commercial standpoint. If flaws, cracks, carbon spots, clouds, or other blemishes or imperfections are visible under this magnification, the Federal Trade Commission has ruled that the term "perfect" cannot be applied.

Measurement of the specific gravity, or the ratio of the density of the gem to that of water, is a safe and often a definite method of identification. The specific gravity of the diamond is 3.52; the figure for the similar appearing but less valuable zircon is 4.0 to 4.7. Certain stones may be identified by the way they transmit and refract light. X-ray examination detects cultured pearls and also assembled stones known as doublets and triplets.

In a "true doublet" two genuine stones are joined to increase the apparent size. A "false doublet" may be a genuine stone backed by a larger piece of glass or other less valuable material. Triplets involve three layers. An example is the so-called soldered or "soude" emerald. Two pieces of colorless quartz are cemented by a green substance which gives the assembly an emerald appearance. The color of some stones can also be "improved" at least temporarily by heat, dyes, surface films, exposure to X rays, or even by cyclotronic bombardment.

The most common fraud in jewelry is the sale of cheap stones under names closely resembling those of valuable gems. Red garnets have been sold, for example, under such names as American ruby, Arizona ruby, Montana ruby, or Cape ruby. Transparent quartz has been offered as Arkansas, Herkimer, Alaska, or Cornish diamonds. Garnets and quartz stones are often attractive, but they should be bought only for what they are. A purchaser's best bet, of course, is to get a guarantee in writing at the time he buys that the jewelry is whatever it is represented to be. If in doubt, he should have a laboratory examination made before laying out any large sum. Some laboratories will identify a stone for $2; an appraisal usually costs from $2 up. Even a stone worth $5000 will be appraised by many jewelers for no more than $20.

A note on jewel measurements

Gemstones are measured usually by the metric carat, a unit of weight derived from the *carob*, a small oriental bean the size of an apple seed. Since 1913 this has been standardized as a fifth of a gram.

Diamonds under a carat are usually measured in "points," with 100 points equaling one carat.

Some pearls are sold by the carat, but the usual pearl measurement is the grain. The word "carat" is also used abroad to indicate the composition of gold alloys. In America the word is spelled "karat" for this use.

A dealer has the 44-carat, steel-blue Hope diamond up for sale. The estate of Mrs. Evalyn Walsh McLean valued it at $176,920, twice its 1830 price

the hardest stone (and the hardest to get)

The diamond is the most important of precious stones for a number of reasons. It fulfills the basic gem requirements of beauty and rarity to a greater degree than any other. It is the hardest of stones (and also, in the words of Mae West, "the hardest to get"). In ordinary sizes, the diamond is the most valuable of gems. It is one of the few gems with industrial worth, and any diamond not beautiful enough to be a gem can be put to work in a cutting tool.

In addition the diamond has been endowed, especially in the last seventy-five years, with such sentiment that the diamond engagement ring has become a custom almost as imperative as the wedding band. It is one of the jokes of history that a bachelor, Cecil Rhodes, the developer of South Africa, popularized this idea and profited hugely from it.

Thousands of Americans who buy no other gems buy diamonds, and the money value of diamond sales exceeds that of all other gem stones combined. Gem-diamond imports into the United States reached a record $166,000,000 in 1946 and would have been greater if the British syndicate that virtually controls diamond production had made more of them available.

The best place to buy is probably a jewelry store or department store known both for expertness and probity, where the purchaser can, without haste and in good light, select what he likes and can afford. There are other sources. Both Sears-Roebuck and Montgomery Ward, for example, do a large mail-order business in diamonds on a 30-day returnable basis. In any event, beware of mysterious bargains, stores which refuse to guarantee the accuracy of their description of the stones they sell, and high pressure clerks. ***Continued on next page***

Individual diamonds vary greatly in quality and there is a wide range in prices for stones of the same size. The higher prices can be wholly legitimate, for small differences, often not visible to the eye, make a big difference in value. A flawed one-carat diamond may be had for $240 but a top-quality stone is likely to cost $660 to $1400 and an exceptionally fine one would command even more.

The most obvious factor of diamond value is carat weight. As nature produces the peculiar crystallized carbon that is a diamond less often in large sizes than in small, the larger sizes have a greater basic value per carat. A fine two-carat stone, for example, may cost 45% to 50% more per carat than two one-carat stones. In general the smaller the diamond, the less it is per carat, except for tiny stones (16 or more to the carat) where the greater expense of cutting enters in.

Besides weight, a gem diamond's value is determined by its color, perfection or freedom from flaws, and its "make," including shape and cutting. Serious imperfections, if any, are most likely to affect the value of a diamond but, if not too apparent, imperfections may be less important than color. In diamonds, color refers to the very slight variations in tint from the ideal colorless or white stone with a slight blue tint.

The variations are usually tinges of yellow or brown. A diamond with the slightest touch of these colors is of less value and, with the exception of "canary yellows" and definitely brown stones known as "fancy browns," the darker the tinge the less the value. There are also diamonds in shades of pink, green, violet, and black, all so rare as to be of no concern to the average purchaser.

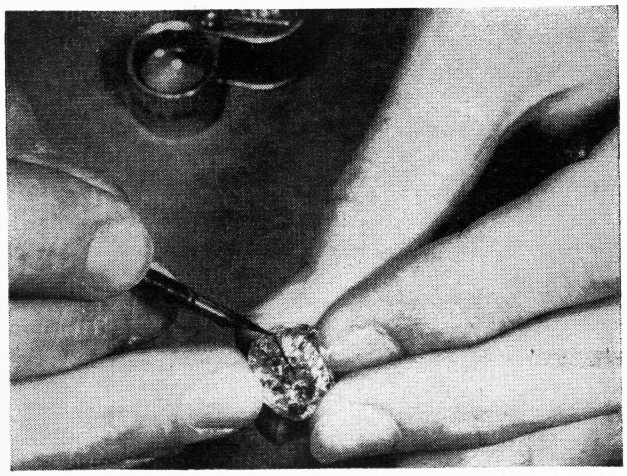
Color and perfection

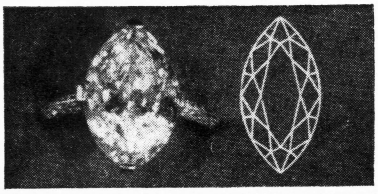
An old classification based partly on African sources ranked diamonds by color in a descending order of value as follows: 1. Fancy blue; 2. Rivers; 3. Wesseltons; 4. Top Crystal; 5. Crystal; 6. Top Cape; 7. Cape (light yellow); 8. Yellow (dark). Rivers, also known as Jaegers for the Jaegersfontein mine, were colorless stones. Those below this rank were increasingly tinged with yellow.

The term blue-white was later applied to the first five of these classifications, but the Federal Trade Commission now forbids use of the term to describe a diamond that is tinged with any color other than blue. Only the colorless, or white with a slight bluish tint, can ethically be sold as a blue-white diamond.

Perfection in a diamond properly has to do only with the clarity of the stone and is a much misused term. Since it refers only to material and not to cut or color, a diamond can be perfect and off-color or improperly cut at the same time.

The make of a diamond involves the correctness of proportions, size, symmetry, faceting, finishing, and polishing. A well-made diamond is always highly polished, has even facets, a narrow girdle, and is of pleasing size and appearance. A diamond's brilliance, or its power to reflect rays





MARQUISE CUT

of light and to disperse them into the colors of the spectrum, is dependent not so much on the number of facets, as was formerly thought, but upon proportion and careful finishing.

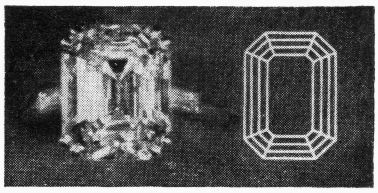
At one time the cut of a diamond was designed to preserve as much of the stone as possible; many diamonds were cut in unique shapes not duplicated today. Now the emphasis is more on getting the greatest possible brilliance from a stone and the designs have been pretty well standardized. Most of the smaller stones sold in this country are cut in Europe because the cost of cutting is proportionately greater in small than in large stones and it can be done for considerably less there than here.

Stones that are too shallow or too deep leak light through the bottom or sides instead of reflecting it back through the top surface of the diamond. About two-sevenths of the diamond should be above the girdle by present cutting standards. Cuts may take many forms but the most popular are the standard brilliant, marquise, and emerald cuts (see illustration). A modification of the last is the square cut, which lacks corner facets. The more common fancy cuts include heart, kite, keystone, pear, lozenge, hexagon, triangle, baguette, bullet, trapeze, half-moon, and epaulet shapes. These usually are the result of an unusual shape of stone or a special whim on the part of a buyer.

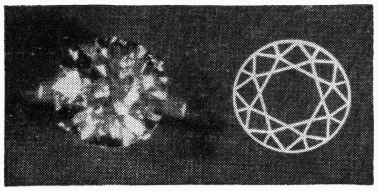
It is the round brilliant that is generally most popular and this cut is a little more expensive in usual sizes. A one-carat diamond in an emerald cut runs approximately 20% less than the same quality diamond in a round cut. A two-carat emerald cut is about 12% less than the same size in the round. Emerald cuts in sizes of three, four, and five carats begin to even up and are about the same price as the round.

There are no synthetic gem diamonds. Both scientists and swindlers have failed in efforts to produce them, and

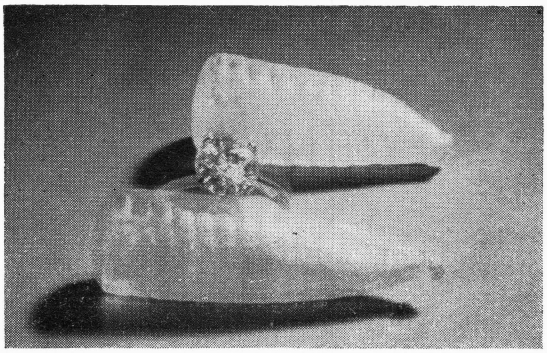
The first step in cutting a diamond is to mark the girdle (outside edge) with India ink. Brilliant and marquise cut stones usually have 58 facets when they have a flat bottom face (culet), 57 when the bottom is sharp



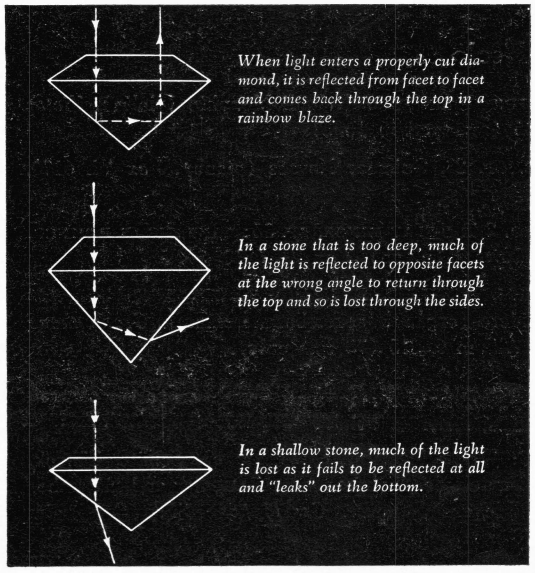
EMERALD CUT



BRILLIANT CUT



The stone in the ring above was cut from a boule of titania like those shown. Titania is a synthetic more refractive, hence more brilliant than diamonds, but yellowish and softer


When light enters a properly cut diamond, it is reflected from facet to facet and comes back through the top in a rainbow blaze.
In a stone that is too deep, much of the light is reflected to opposite facets at the wrong angle to return through the top and so is lost through the sides.
In a shallow stone, much of the light is lost as it fails to be reflected at all and "leaks" out the bottom.

on the industrial side only a few controversial black specks exist. Those who want to wear something resembling a diamond, but who cannot afford the real article, can choose between the zircon, the new synthetic rutile, and the common rhinestone. All of these are softer and much less costly; and the rhinestone, though it once was rock crystal from the Rhine River area, is now just glass, usually backed by tinfoil.

The zircon is a natural stone occurring in a number of varieties. Some of these have high refractive indexes, though not so high as the diamond, and can be cut into stones of considerable fire and brilliance. Zircons are found in many colors, but the blue and white are rare, and most of those appearing on the market are yellow-brown stones that have been heated to improve their color. Advertisements in jewelry trade magazines of "zircons that stay white" indicate that the improvement is not always permanent.

Lack of hardness is one of the objections to the new synthetic rutile, or titania, advertised typically as "amazing new discovery—more brilliant than a diamond." As nature does not provide gem-quality rutile in quantity, its synthesis is a real technical achievement, and rutile does have a higher refractive index (2.61 to 2.90) than the diamond (2.42). But the advertising fails to emphasize that rutile has a hardness of only 6 to 6.5 on the Mohs scale against the diamond's 10 and that scratches may mar its brilliance. Synthetic rutile is now called, among other things, Titania Brilliant, Kenya Gem (which is misleading), Titania Rainbow Diamond (which is just plain false).

Even with considerable heat treatment, the best synthetic rutile stones so far have been of a yellow-straw color similar in hue to diamonds classed as "top cape" or "cape."

What they cost

Thanks in part to the policies of the British syndicate controlling production, diamond prices have been generally rising for the last 70 years, except for brief periods. One of those periods followed the last war. In the United States there was a small decline in the diamond market from 1946 until about the beginning of the Korean conflict. Since then prices of the stones have risen again, in some cases reaching and even passing the 1946 levels.

A good part of the price the consumer pays for diamonds is not paid for the jewel at all. The markup on diamonds, which have most of their retail sales concentrated in the month before Christmas and in the late spring before June weddings, runs pretty high, sometimes around 100% of the wholesale price. If imported as loose cut stones (and most gem diamonds are), they are subject to a tariff of 10%. This is on top of a South African export tax of 10%. Then after everything else has been added, there's the Federal excise tax of 20% of the retail price.

A recent (October) national survey showed that sound quarter-carat diamonds were selling at retail in this country for about $100 to $240, including the Federal tax; half-carat stones for $275 to $550; one-carat for $660 to $1400; and two-carat for $1460 to $3750. Those shopping for even bigger stones shouldn't have to worry about price.

records

BY PHILIP MILLER

With the decision of RCA Victor to join the producers of LP records, the future of recorded music seems a little clearer than for some time past, though possibly not for long. By no means all of the Victor catalog is as yet available on 33⅓-rpm discs, but the lists of Red Seal LP's have been drawing on the best sellers of the past as well as new material. Columbia, with its headstart, now has an extensive repertoire at the slow speed, and all new releases from this company have for some time been published both ways. Columbia has also joined RCA Victor in the production of 45-rpm discs, though Columbia will probably confine such releases to popular music. It has been rumored (and denied) that RCA Victor may even bring out a 45-rpm long-playing record, and Zenith is reported to be at work on a 16-rpm "very long playing" record.

The following list brings together some of the best offerings in various categories issued since this time last year. Such has been the quantity of records produced that many of those included have not been reviewed in CONSUMER REPORTS during the year. Most of the numbers represent LP versions, including some originally reviewed in other forms. But no recording is listed which has not been listened to in the form in which it is listed.

Bach centennial recordings

BRANDENBURG CONCERTOS. Soloists and Chamber Group under Fritz Reiner. *Columbia* ML 4281, 4282, 4283, $4.85 each.

DIE KUNST DER FUGE (THE ART OF FUGUE) (arr. Roger Vuatez). Radio Orchestra of Beromünster, Switzerland, under Hermann Scherchen. *London* LLP A-2, $18.75 (reviewed in June).

SONATAS AND PARTITAS FOR UNACCOMPANIED VIOLIN. Alexander Schneider (violin). *Mercury* MGL 1, $19.40.

SUITES FOR UNACCOMPANIED CELLO: NO. 4 IN E-FLAT; NO. 5 IN C-MINOR. Pablo Casals (cello). *Victor* DM-1302, $9.75 (78 rpm only; reviewed in March).

DAS WOHLTEMPERIRTE CLAVIER (The Well-Tempered Clavier), **BOOK 1:** PRELUDES AND FUGUES NOS. 1-8. Wanda Landowska (harpsichord). *Victor* LM 1017, $5.45 (reviewed in April).

Orchestral

BEETHOVEN: SYMPHONY NO. 3 IN E-FLAT, OP. 55 ("EROICA"). Philharmonic-Symphony Orchestra of New York under Bruno Walter. *Columbia* ML 4228, $4.85 (reviewed in February).

SAMMARTINI: CONCERTO GROSSO, OP. 11, NO. 4; **PERGOLESI:** TRIO SONATA WITH STRING ORCHESTRA; **CORELLI:** CONCERTO GROSSO, OP. 6, NO. 9. Vienna Symphony Orchestra under Rudolf Moralt. *Westminster* WL 50-9, $5.95.

TCHAIKOVSKI: CAPRICCIO ITALIEN, OP. 45; **BIZET:** CARMEN—SUITE. Columbia Symphony Orchestra under Sir Thomas Beecham. *Columbia* ML, 4287, $4.85 (reviewed in May).

WAGNER: PARSIFAL—PRELUDE AND GOOD FRIDAY SPELL. NBC Symphony Orchestra under Arturo Toscanini. *Victor* LM 15, $4.45.

Ballet

COPLAND: BILLY THE KID—BALLET SUITE. RCA Victor Symphony Orchestra under Leonard Bernstein. *Victor* WDM 1333, $3.35 (reviewed in April). **STRAVINSKY:** ORPHEUS. RCA Victor Symphony Orchestra under Igor Stravinsky. *Victor* LM 1033, $5.45 (reviewed in April).

Concertos

BEETHOVEN: CONCERTO NO. 1 IN C, OP. 15. Walter Gieseking (piano) and Philharmonia Orchestra. *Columbia* ML 4307, $4.85.

BRAHMS: CONCERTO IN D, OP. 77. Yehudi Menuhin (violin) and Lucerne Festival Orchestra under Wilhelm Furtwaengler. *Victor* WRM 1361, $5.25.

PROKOFIEV: CONCERTO NO. 3 IN C, OP. 26. William Kappell (piano) and Dallas Symphony Orchestra under Antal Dorati. *Victor* WDM 1326, $3.35 (reviewed in February).

Chamber music

BEETHOVEN: OCTET IN E-FLAT, OP. 103; RONDINO IN E-FLAT, GROVE 146. Members of Little Symphony Society under Thomas Scherman. *EMS* 1, $5.95 (reviewed in May).

BEETHOVEN: QUARTET, OP. 18, NO. 5, IN A. Paganini Quartet. *Victor* WDM 1363, $3.35.

BRAHMS: SONATAS, OP. 120—NO. 1 IN F-MINOR; NO. 2 IN E-FLAT. Reginald Kell (clarinet) and Mieczyslaw Horszowski (piano). *Mercury* MG 10016, $4.85.

HAYDN: OCTET IN F. Vienna Philharmonic Wind Group (with **BOCCHERINI:** SYMPHONY IN A. Vienna Philharmonic Orchestra under Henry Swoboda). *Westminster* WL 50-2, $5.95.

PURCELL: SONATAS (first set of 12). Henri Merckel, Georges Alès (violins), André Navarra (cello) and Isabelle Nef (harpsichord). *Oiseau Lyre* OLP 1, $17.50.

Instrumental solo

BARTÓK: SONATA FOR VIOLIN SOLO. Yehudi Menuhin (violin). *Victor* WDM 1350, $3.35 (reviewed in June).

CHOPIN: PRELUDES, OP. 28. Guiomar Novaes (piano). *Vox* VL 6170, $4.85.

CHOPIN: SONATA NO. 2 IN B-FLAT MINOR, OP. 35; FANTASIE IN F MINOR, OP. 49. Guiomar Novaes (piano). *Vox* VL 6230, $4.85.

MUSIC OF BUXTEHUDE, FROBERGER, MARCHAND, TUNDER, WECKMANN, AND PACHELBEL. Fin Videro (organ). Jaegersborg, Denmark. *Gramophone Shop Celebrities* Album 6, $15 (78 rpm only).

Choral and sacred music

BAROQUE CANTATAS: Works by Tunder, Weckmann, Schütz, Lübeck, Bernhard, and Buxtehude. Soloists, Boys' Choir and Chamber Orchestra under Mogens Wöldike. *Gramophone Shop Celebrities* Album 5, $15 (78 rpm only).

BEETHOVEN: MASS IN C, OP. 86. Soloists, Akademie Kammerchor and Vienna Symphony Orchestra under Rudolf Moralt. *Vox* PL 6300, $5.95.

BLOCH: SACRED SERVICE (AVODATH HAKODESH). Marko Rothmuller (baritone), London Philharmonic Choir and London Philharmonic Orchestra under Ernest Bloch. *London* LLP 123, $5.95.

CARISSIMI: JEPTHE; **MARCELLO:** BEATO L'UOM. Soloists, Angelicum Chorus and Orchestra (Milan) under E. Gerelli. *Vox* PL 6100. $5.95.

HAYDN: MISSA CELLENSIS IN C ("MARIAZELLERMESSE"). Soloists, Akademie Kammerchor and Vienna Symphony Orchestra under Hans Gillesberger. *Haydn Society* HSLP 2011, $5.95.

KODÁLY: TE DEUM. Soloists, Wiener Choir and Vienna Symphony Orchestra under Henry Swoboda (with **KODÁLY:** THEATRE OVERTURE. Vienna Symphony Orchestra under Henry Swoboda). *Westminster* WL 50-1, $5.95.

MOZART: MASS IN C-MINOR, K 427. Soloists, Akademie Kammerchor and Vienna Symphony Orchestra under Meinhard von Zallinger. *Haydn Society* HSLP 2006, $11.90.

SCHUBERT: MASS IN E-FLAT. Soloists, Akademie Kammerchor and Vienna Symphony Orchestra under Rudolf Moralt. *Vox* PL 7750, $7.70.

SCHUBERT: TWENTY-THIRD PSALM and other choruses: FOLK SONGS: Rosenstock, Holderblüh, etc. Vienna Choir Boys under Ferdinand Grossman. *Capitol-Telefunken* P 8085, $4.85.

SCHÜTZ: WEIHNACHTS-HISTORIE. Soloists, Cantata Singers and Orchestra under Arthur Mendel. *REB Editions* 2, $5.95.

STRAVINSKY: MASS. Men and Boys' Chorus and Double Wind Quintet under Igor Stravinsky. *Victor* WDM 1349, $3.35.

Opera

OFFENBACH: LES CONTES D'HOFFMANN. Vina Bovy (soprano), Geori-Boué (soprano), Raoul Jobin (tenor), Roger Bourdin (baritone), André Pernet (basso) and others with Opéra-Comique Chorus and Orchestra under André Cluytens. *Columbia* SL 106, $14.55.

PUCCINI: GIANNI SCHICCHI. Giuseppe Taddei (baritone) and others with Orchestra of Radio Italiana under Alfredo Simonetto. *Cetra-Soria* 50028, $5.95.

PUCCINI: IL TABARRO. Clara Petrella (soprano), Glauco Scarlini (tenor), Antenore Reali (baritone) and others with Orchestra of Radio Italiana under Giuseppe Baroni. *Cetra-Soria* 50029, $5.95.

RAMEAU: LES INDES GALANTES. Irene Joachim (soprano) and others with Gouverné Choir and Hewitt Orchestra. *Vox* DL 6080, $5.95.

VERDI: FALSTAFF. Giuseppe Taddei (baritone), Lina Pagliughi (soprano), Emilio Renzi (tenor) and others with Radio Italiana Chorus and Orchestra under Mario Rossi. *Cetra-Soria* 1207, $17.85.

WEILL: DOWN IN THE VALLEY. Soloists and RCA Victor Orchestra under Peter Herman Adler. *Victor* WDM 1367, $3.35.

Vocal solo

BARTÓK AND KODÁLY: FOLK SONGS OF HUNGARY. Leslie Chabey (tenor) and Tibor Kozma (piano). *Bartók* BRS 004, $5.95.

ITALIAN SONGS OF THE RENAISSANCE AND BAROQUE: Works by Monteverdi, Carissimi, Cesti, Scarlatti and Vivaldi. Gabriella Gatti (soprano) and George Malcolm (harpsichord). *Gramophone Shop Celebrities* Album 7, $11.20 (78 rpm only).

POULENC: LE BAL MASQUÉ. Warren Galjour (baritone) with Ensemble under Edvard Fendler. *Esoteric* 2000, $4.75.

SCHUMANN: DICHTERLIEBE, OP. 48. Mack Harrell (baritone) and George Reeves (piano). *Victor* WDM 1387, $3.35.

STRAUSS: *Allerseelen; Befreit;* **SCHUBERT:** *Wanderers Nachtlied; Lachen und weinen; Wohin?* **VERDI:** DON CARLO—*Tu che le vanità;* **CATALANI:** LA WALLY—*Ebben? ne andrò lontana.* Ellabelle Davis (soprano), Hubert Greenslade (piano) and New Symphony Orchestra under Warwick Braithwaite. *London* LPS 181, $4.85.

WOLF: *Auf einer Wanderung; Verschwiegene Liebe; Verschling der Abgrund; Um Mitternacht; Cophtisches Lied No. 2; Elfenlied; Schlafender Jesuskind; Auf dem grünen Balkon.* Blanche Thebom (mezzo-soprano) and William Hughes (piano). *Victor* WDM 1380, $3.35.

Ethnic music

CUBA, Ethnic Folkways Library EFL 1410, $7.33. **ETHIOPIA,** EFL 1405, $7.33. **FALASHAS** (Jews of Ethiopia), EFL 1201, $5. **HUNGARY:** (Bartók Collection), EFL 1000, $10. **MIDDLE EAST** (Azerbaijan, Armenia, Uzbek, Bukhar). EFL 1416, $7.33. **RUMANIA** (Bartók Collection), EFL 1419, $7.33. **UKRAINE,** EFL 1301, $5.78 (78 rpm only). **NEGRO FOLK MUSIC OF ALABAMA,** EFL P 417 and P 418, $5.95 each (LP).

Miscellaneous

I CAN HEAR IT NOW, Vol. 2. Edward R. Murrow (narrator). *Columbia* ML 4261, $4.85 (reviewed in February).

PLEASURE DOME (Poems by T. S. Eliot, William Carlos Williams, Elizabeth Bishop, Marianne Moore, W. H. Auden, Dylan Thomas, E. E. Cummings and Ogden Nash). Lloyd Frankenberg (editor). *Columbia* ML 4259, $4.85 (reviewed in March).

RECORDS FOR *children*

Selected and reviewed by ***BEATRICE LANDECK*** *of the Department of Music Education, Mills School for Nursery, Primary and Kindergarten Teachers*

Children's records, which sell for 25c to $2 each, make better Christmas presents than ever for youngsters, now that almost all of them are unbreakable. Since they no longer need the protection of bulky stiff-covered albums, they usually come in convenient folders, and these are often handsomely decorated. Because 78-rpm records have less delicate grooves and the players are more easily handled by children than the LP or 45-rpm kind, the following list covers only 78-rpm releases.

Outstanding for the high quality of their releases are two children's record clubs—Young People's Records, Inc., 920 Broadway, NYC, and one which is new this year, Children's Record Guild, 27 Thompson Street, NYC. Both either already sell records singly or will shortly do so (for $1.24 and $1.15 respectively) as well as by subscription. Both put out one 10-inch record a month for each

CHILDREN'S RECORDS continued

of two age categories—preschool (around 2 to 4) and elementary (around 5 to 8). A subscription to Young People's Records costs $13.85 a year for 12 records, plus a gift record for joining. A Guild subscription costs $12.60 a year for 13 records and a monthly bulletin with articles on various aspects of the child's musical education. Probably the best children's records of the year are the *Guild's* LITTLE RED WAGON, I WISH I WERE, and GRANDFATHER'S FARM; and *Young People's Records'* MORE PLAYTIME SONGS, SINGING IN THE KITCHEN, and BY ROCKET TO THE MOON.

It is advisable to play any children's records in the store not only to check on surface quality (scratchiness and clearness of tone), but—even more important—to evaluate their content for the particular child you have in mind. The records listed below make up a wide assortment to include a few for different tastes and pocketbooks.

25c RECORDS

LITTLE GOLDEN RECORDS (Simon & Schuster, Inc., 1230 Sixth Avenue, NYC) issues 6-inch records, attractively packaged at 25c each and available in many drugstores. For young children (up to 6) with short attention span, there is no better buy than these small records.

49c RECORDS

CONTINENTAL JUNIOR (Continental Record Co., 263 West 54th Street, NYC) offers a wide selection of stories and songs on 10-inch records packaged in multi-colored envelopes. The stories are the usual fairy tales or are on such subjects of interest to children as cowboys, trains, and animals. Unfortunately, there is often too much happening at once and too fast in the stories. The songs, on the other hand, are simply performed. All are sung by Scotty MacGregor with guitar accompaniments. *Continental Juniors* are suitable for a wide age range.

LINCOLN (Lincoln Records, Inc., 8 West 40th Street, NYC) has an extensive catalog of 10-inch records of the usual stories and songs for children under 6. The songs are introduced by simple stories. These are generally well produced but cheaply packaged in envelopes of uniform design. Five records of Christmas carols are available. Also recommended are the following:

THE FISHERMAN AND THE FLOUNDER and THREE BLIND MICE (539)
A FROG HE WOULD A-WOOING GO and BILLY BOY (510)

59c RECORDS

KIDDIE LAND (Willida Records Co., 1595 Broadway, NYC) has a catalog of 10-inch records which are unusually good for this price. Each is packaged in a decorated envelope. For the younger age group S. S. LOLLIPOP, NURSERY RHYMES, GAMES, AND SONGS (KL 13), and LET'S GO ON A HAY RIDE (WR 10) are especially nice. For older children there are two series of interest. In the first, PETROUCHKA (KL 12) and PETER AND THE WOLF (KL 6) are available in condensed form, well arranged to interest children. Records like these offer an easy way to familiarize youngsters with good music. The second series contains a number of folklore records including PECOS BILL (KL 1), JOHNNY APPLESEED (KL 9), and THE LEGEND OF SLEEPY HOLLOW (KL 11). JOHNNY APPLESEED is the best.

79c RECORDS

MELODEE (Melodee Records, Inc., 314 West 52nd Street, NYC) is making 10-inch records for 78-rpm phonographs which they call Intermediate Long Playing. Each record plays for approximately ten minutes on each side instead of the normal six. *Melodee* has the usual fairy tales and also a 10-minute record of Irving Caesar's SONGS OF SAFETY (ILP 14) which is nice.

RECORDS 95c AND UP

(For comment on **CHILDREN'S RECORD GUILD** and **YOUNG PEOPLE'S RECORDS**, see the introduction.)

BELDA TALKING KOMICS (Belda Record and Publishing Co., 35 N. Arroyo Parkway, Pasadena, Calif.) are an interesting innovation in children's records. They cost 98c each and consist of a 10-inch record and a comic book with text, illustrating the record. Both are contained in an attractive envelope which has a simple arrangement of the musical theme printed on its back. Though the records have a story, they are primarily musical, and the comic books might well serve to attract to music a child who has shown no interest in it before. *Talking Komics* are suited to children over 6. Outstanding are the following: LONESOME OCTOPUS, CHIRPY CRICKET, GRUMPY SHARK, and HAPPY GRASSHOPPER.

This company also has a single 10-inch disc called MYSTO MAGIC, designed for younger children. It comes in a regular record jacket and is a recording of the usual nursery tunes. The magic is that the player cannot tell which tune the record will play. The grooves are so arranged that the needle may pick up any one of three on each side.

PHONO-BOOKS (Graphic Educational Productions, Inc., 1108 Lillian Way, Hollywood, Calif.) are a most interesting combination of books and records. Each has 16 pages of text and really beautiful illustrations between two stiff covers with a spiral binding. A record is inserted in the back of the front cover. Each book is tastefully designed in several colors, and any one of them would be a welcome addition to a child's library. In interesting stories based on fact the *Phono-Books* provide the answers to many questions children of around 4 to 8 are likely to ask. If a child does actually ask any of these questions, this is an excellent way to answer them, but unfortunately the *Phono-Books* assume the question and don't try very hard to arouse the interest of the child who hasn't asked. Each book sells for $1.95. There are five categories:

"WHAT" STORIES (WHAT MAKES RAIN?, WHAT ARE STARS?, etc.)

"HOW" STORIES (HOW DID WE LEARN TO COUNT?, etc.)

"WHY" STORIES (WHY ARE BEES SO BUSY?, etc.)

"WHO" STORIES (WHO WAS AESOP?, WHO WAS DANIEL BOONE?, etc.)

"WHERE" STORIES (WHERE DO BIRDS GO IN WINTER?, etc.)

DECCA (single 10-inch records, $1.05; single 12-inch, $2.10; two 10-inch in a folder, $2.36): THE LITTLE TUNE THAT RAN AWAY, told and sung by Peter Lind Hayes, a single 12-inch (CU 108), is an amusing tale for young children. Frank Luther sings LADDLE LADDLE LADDLE ON A LOLLYPOP and WHATTA YA WANNA BE (K 6) and also PETER COTTONTAIL and FLOPPY (K 1) for children under six; both are on 10-inch discs. Especially charming for the young set is the folder (two 10-inch records) of LITTLE ORLEY, *His Adventures with the Barn Dance, The Poison Ivy, The Moon, and The Pancake* (CUS 19). Frank Luther also sings a good collection of cowboy songs, GET ALONG LITTLE DOGIES (CUS 18)—two 10-inch records.

COLUMBIA (single 10-inch records, $1.05; folder of two, $2.25; folder of three, $3.25) has three musical treats for little children: WHEN WE WERE VERY YOUNG, poems by A. A. Milne, music by H. Fraser-Simson, sung by Gene Kelly (MJ 42), two 10-inch records; Burl Ives singing two collections of songs, ANIMAL FAIR (MJV 59), two 10-inch records; and MOTHER GOOSE SONGS (MJV 67), a single 10-inch record. For a child who is interested in piano, one of the best recordings of the year is THE EAGER PIANO (MJ 43), two 10-inch records. Also available are two Gene Autry cowboy folders, CHAMPION (MJV 62) and STAMPEDE (MJV 55). Both have two 10-inch records. The baseball fans will be interested in SLUGGER AT THE BAT with Pee Wee Reese and Jackie Robinson (MJV 57), two 10-inch records. Another good item is TIGER, a "Bring 'em Back Alive" story by Frank Buck, starring the author (MJV 63), two 10-inch records. Dinah Shore is the star in a big production from Walt Disney's *Fun and Fancy Free*—BONGO (MJ 41), three 10-inch records.

RCA VICTOR has several releases in its Little Nipper Junior series. Although much of the material is in the conventional vein, the records are so attractively packaged and so smoothly performed that they make a very acceptable gift for a child under six. These are some of the titles on single 10-inch records at $1 each. Cliff Edwards sings FUN ON OLD MACDONALD'S FARM, FUN WITH MOTHER GOOSE, FUN ALL DAY LONG, and A, B, C AND 1, 2, 3 FUN. Fran Allison does a fine job with *Peter Cottontail* in SONGS OF FUN. Also available are COWBOY FUN (Texas Jim Robertson), and MUSIC FUN (Spike Jones), and nursery stories. In the *Story Book Album* series is UNCLE WIGGILY, as told by Paul Wing. This is a record reader with 24 pages of text and colored illustrations in an album with two 10-inch records (Y 415), $3.57.

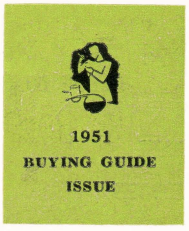
MGM's big splash in the children's record field is the release of TOM AND JERRY AT THE CIRCUS, based on the popular cat-and-mouse movie cartoons. This is a record reader with 16 pages of illustrated story and two 10-inch records in a hard-cover album (51-A), $3.57. Produced with taste.

MERCURY has made two recordings with a very amusing popular singer called "Two-Ton Baker." On one he accompanies himself on the piano and sings four nonsenical songs: SING A SILLY SONG (MMP 9), two 10-inch records, $1.58. He also narrates a story, BOOMER, THE BASS DRUM (MMP 11), a single 12-inch record, $1.31. Although these are novelties, they are more interesting than the fairy tale releases of the same company.

THE DECEMBER REPORTS

★

will be the annual Buying Guide issue—published in December for use through 1951. No regular issue of CONSUMER REPORTS appears next month. For details of the Buying Guide see the back cover. All regular subscriptions include the Buying Guide issue. All Christmas gift subscriptions start with it.



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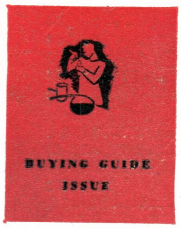

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